

# Permit to Operate

<b>FACILITY:</b>	S-37	<b>EXPIRATION DATE</b>	08/31/2007
<b>LEGAL OWNER OR OPERATOR:</b>	KERN OIL & REFINING COMPANY		
<b>MAILING ADDRESS:</b>	7724 E PANAMA LANE BAKERSFIELD, CA 93307-9210		
<b>FACILITY LOCATION:</b>	PANAMA LN & WEEDPATCH HWY BAKERSFIELD, CA 93307-9210		
<b>FACILITY DESCRIPTION:</b>	PETROLEUM REFINING		

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

**DAVID L. CROW**  
Executive Director / APCO

**Seyed Sadredin**  
Director of Permit Services

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-0-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

## PERMIT UNIT REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0], [Federally Enforceable Through Title V]
4. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081 and County Rule 108.1 (Kern)], [Federally Enforceable Through Title V]
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1], [Federally Enforceable Through Title V]
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031], [Federally Enforceable Through Title V]
7. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040], [Federally Enforceable Through Title V]
8. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M], [Federally Enforceable Through Title V]
9. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2], [Federally Enforceable Through Title V]
10. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1], [Federally Enforceable Through Title V]
11. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020], [Federally Enforceable Through Title V]
12. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1], [Federally Enforceable Through Title V]
13. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

14. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1], [Federally Enforceable Through Title V]
15. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with Section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0], [Federally Enforceable Through Title V]
16. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7], [Federally Enforceable Through Title V]
17. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2], [Federally Enforceable Through Title V]
18. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3], [Federally Enforceable Through Title V]
19. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4], [Federally Enforceable Through Title V]
20. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5], [Federally Enforceable Through Title V]
21. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9], [Federally Enforceable Through Title V]
22. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1], [Federally Enforceable Through Title V]
23. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2], [Federally Enforceable Through Title V]
24. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3], [Federally Enforceable Through Title V]
25. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4], [Federally Enforceable Through Title V]
26. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01), by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)], [Federally Enforceable Through Title V]
27. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1], [Federally Enforceable Through Title V]
28. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4], [Federally Enforceable Through Title V]
29. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (10/31/01). [District Rule 4601, 6.1 and 6.3], [Federally Enforceable Through Title V]
30. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0], [Federally Enforceable Through Title V]

## Initial TV Permit

31. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F], [Federally Enforceable Through Title V]
32. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B], [Federally Enforceable Through Title V]
33. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021(11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011], [Federally Enforceable Through Title V]
34. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011], [Federally Enforceable Through Title V]
35. An owner/operator shall prevent or cleanup any carryout and trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (11/15/01) or Rule 8011 (11/15/01) [District Rule 8041 and 8011], [Federally Enforceable Through Title V]
36. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011], [Federally Enforceable Through Title V]
37. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and 8011], [Federally Enforceable Through Title V]
38. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8071 and 8011], [Federally Enforceable Through Title V]
39. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16], [Federally Enforceable Through Title V]
40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
41. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (10/31/01); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (10/31/01); 8021 (11/15/01); 8031 (11/15/01); 8061 (11/15/01); A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
43. On January 31, 2003, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520], [Federally Enforceable Through Title V]
44. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
45. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
46. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

## Initial TV Permit

47. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]
48. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]
49. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]
50. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]
51. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]
52. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]
53. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]
54. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]
55. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]
56. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]
57. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]
58. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]
59. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found. [District Rules 4451, 6.2.1 and 4452, 6.2.1], [Federally Enforceable Through Title V]
60. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

61. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]
62. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]
63. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]
64. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]
65. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]
66. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]
67. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]
68. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-1-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

120 MMBTU/HR CRUDE UNIT INCLUDING 2 DESALTERS, 4 FRACTIONATION VESSELS, STRIPPER, 2 ACCUMULATORS, DEPROPANIZER, KNOCKOUT DRUM SCRUBBER, 60 MMBTU/HR TULSA HEATERS INC. PROCESS HEATER, 60 MMBTU/HR BORN HEATER AND 15 HEAT EXCHANGERS

## **PERMIT UNIT REQUIREMENTS**

1. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)], [Federally Enforceable Through Title V]
2. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO<sub>2</sub> at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
4. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
5. Compliance with sulfur compound emission limit(s) is demonstrated by firing the unit only on PUC or FERC regulated natural gas. [District Rules 4301, 4801 and 2520, 9.3.2], [Federally Enforceable Through Title V]
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407, District Rule 4801], [Federally Enforceable Through Title V]
7. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, labeled and records kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
8. Pump and compressor seals shall operated free of leaks (as defined by Rule 4452), inspected, labeled and records kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
9. 60 MM Btu/hr Tulsa Heaters Inc. process heater shall be equipped with eight Caldius LE-CSG-8W low NO<sub>x</sub> burners, each having a maximum heat release of 8.18 MM BTU/HR. Heater shall be fired exclusively on PUC or FERC regulated natural gas. [District NSR Rule], [Federally Enforceable Through Title V]
10. 60 MMBtu/hr Born heater shall be equipped with John Zink PSMR-19 low NO<sub>x</sub> burners and shall be fired exclusively on PUC or FERC regulated natural gas. [District NSR Rule, District Rules 4305 and 4351], [Federally Enforceable Through Title V]
11. Tulsa Heaters Inc. process heater emission rates shall not exceed NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub>, CO: 239 ppmvd @ 3% O<sub>2</sub>, VOC: 0.0026 lb/MMBtu, SO<sub>x</sub> (as SO<sub>2</sub>): 0.0006 lb/MM Btu, and PM<sub>10</sub>: 0.014 lb/MMBtu. [District Rule 2201, District Rule 4351 5.1, District Rule 4305, 5.1 and 5.3, District Rule 4301 and Kern County Rule 408], [Federally Enforceable Through Title V]
12. Born process heater emission rates shall not exceed NO<sub>x</sub> (as NO<sub>2</sub>) 30 ppmv @ 3% O<sub>2</sub> or .036 lb/MMBtu, CO: 239 ppmvd @ 3% O<sub>2</sub>, VOC: 0.0026 lb/MMBtu, SO<sub>x</sub> (as SO<sub>2</sub>): 0.0006 lb/MM Btu, and PM<sub>10</sub>: 0.014 lb/MMBtu. [District NSR Rule, District Rules 4351 5.1, 4305, 5.1 and 5.3, District Rule 4301 and Kern County Rule 408], [Federally Enforceable Through Title V]
13. Heat input to Tulsa Heater Inc. process heater shall not exceed 60 MM Btu/hr (hhv), as measured on an annual average basis. [District NSR Rule], [Federally Enforceable Through Title V]
14. Permittee shall demonstrate compliance with the heat input limit of Tulsa Heaters Inc. process heater by maintaining records of hhv of fuel burned and of the cumulative annual fuel use (scf/yr). Records shall be kept for a period of five years and shall be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
15. For each heater, stack concentrations of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> shall be measured at least on a monthly basis using District approved portable analyzers. In-stack O<sub>2</sub> monitors are acceptable for O<sub>2</sub> measurement. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]

## Initial TV Permit

16. If the NO<sub>x</sub> or CO concentrations, as measured by the portable analyzer, exceed the allowable emissions rate, the permittee shall notify the District and return the NO<sub>x</sub> and CO concentrations to the allowable emissions rate as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the allowable emissions rate after one hour, the permittee shall conduct an emissions test within 60 days, utilizing District approved test methods, to determine compliance with the applicable emissions limits. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
17. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The permittee shall maintain records of the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, the measured NO<sub>2</sub> and CO concentrations corrected to 3% O<sub>2</sub>, and the O<sub>2</sub> concentration. The records must also include a description of any corrective action taken to maintain the emissions within an acceptable range. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
19. Operator shall perform annual source testing for NO<sub>x</sub> (ppmv) according to EPA Method 7E (or ARB Method 100), stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100), NO<sub>x</sub> emission rate (heat input basis) by EPA Method 19, CO by EPA method 10 or ARB method 100, stack gas velocities by EPA Method 2, and stack gas moisture content by EPA Method 4. [District Rule 4305, 6.2.2, 6.2.4-7 and 4351, 6.2.2 & 6.2.4-7, & 6.3], [Federally Enforceable Through Title V]
20. Nitrogen oxide (NO<sub>x</sub>) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO<sub>2</sub>/MMBtu of heat input (hvh). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1], [Federally Enforceable Through Title V]
21. During the source test, emissions for these units shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO<sub>x</sub> and CO. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081], [Federally Enforceable Through Title V]
23. Exhaust stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081], [Federally Enforceable Through Title V]
24. Source testing to measure NO<sub>x</sub> and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
25. Source testing to measure NO<sub>x</sub> and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
26. If permittee fails any compliance demonstration for NO<sub>x</sub> or CO emission limits when testing not less than once every 36 months, compliance with NO<sub>x</sub> and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
27. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
28. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
30. Annual test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NO<sub>x</sub> limits of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO<sub>x</sub> emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2 and 4351, 6.3], [Federally Enforceable Through Title V]
31. The following conditions must be met for representative unit(s) to be used to demonstrate compliance for NO<sub>x</sub> limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
32. All units in a group for which representative units are source tested to demonstrate compliance for NO<sub>x</sub> limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]



## Initial TV Permit

33. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
34. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-2-5

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

77.5 HP RERUN UNIT INCLUDING PRE-FLASH DRUM, FRACTIONATOR, STRIPPER, ACCUMULATOR, AND ASSOCIATED VALVES, FLANGES, AND CONNECTORS.

## **PERMIT UNIT REQUIREMENTS**

---

1. Copies of all test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
2. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. Permittee shall maintain a record of hours of operation of the Rerun Unit. Records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
4. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
5. Fugitive VOC emissions shall not exceed 13,656 lb per year. [District NSR Rule], [Federally Enforceable Through Title V]
6. Valves, flanges, and connectors shall be maintained in a leak-free manner as defined by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
7. Pump and compressor seals shall be maintained in a leak-free manner as defined by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
8. Permittee shall comply with all applicable inspection, maintenance, testing, and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451 and 4452], [Federally Enforceable Through Title V]
9. Permittee shall maintain accurate records of number of fugitive components and expected emissions calculated using Technical Guidance Document to AB2588 for refineries Tables D1-D3, AP-42 Table 9.1-2, or other District approved emission factors. [District NSR Rule and District Rule 1070], [Federally Enforceable Through Title V]

**Initial TV Permit**  
**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-3-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

25.0 MMBTU/HR UNIFINER INCLUDING SPLITTER, STRIPPER, REACTOR, SEPARATOR, 3 ACCUMULATORS AND 3 HEATERS

## **PERMIT UNIT REQUIREMENTS**

1. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)], [Federally Enforceable Through Title V]
2. All records shall be retained for a period of at least five years and made available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO<sub>2</sub> at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
4. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 12 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801], [Federally Enforceable Through Title V]
7. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas, certified diesel fuel with a sulfur content of no more than 0.5% by weight, or refinery gas with a sulfur content of no more than 10,000 ppmv or 1% by weight according to the H<sub>2</sub>S monitor installed downstream of the sulfur recovery unit. [District Rules 4301, 4801 and 2520, 9.3.2], [Federally Enforceable Through Title V]
8. Source testing to measure NO<sub>x</sub> and CO emissions shall be conducted for the Splitter reboiler heater and charge heater not less than once every 12 months, except as provided below. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
9. Source testing to measure NO<sub>x</sub> and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
10. If permittee fails any compliance demonstration for NO<sub>x</sub> or CO emission limits when testing not less than once every 36 months, compliance with NO<sub>x</sub> and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
11. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
12. Nitrogen oxide (NO<sub>x</sub>) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO<sub>2</sub>/MMBtu of heat input (hvh). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1], [Federally Enforceable Through Title V]
13. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed: A) 0.036 lb NO<sub>x</sub>/MMBtu or 30 ppmv when unit is gaseous fuel fired, B) 0.052 lb NO<sub>x</sub>/MMBtu or 40 ppmv when unit is liquid fuel fired, C) lower NO<sub>x</sub> limit of the two fuels being fired simultaneously for dual fired units. [District Rule 4351, 5.2.2 and 5.4 and /or District Rule 4305, 5.1 and subsumed District Rule 4301 and Kern County Rule 408], [Federally Enforceable Through Title V]
14. NO<sub>x</sub> requirements shall not apply during natural gas curtailments to units burning liquid fuel that are normally fired with gaseous fuel. This exemption is limited to 336 cumulative hours of operation per calendar year excluding equipment testing not to exceed 48 hours per calendar year. Any unit so exempted shall monitor and record for each unit the cumulative annual hours of operation on each liquid during curtailment and during testing. [District Rule 4305, 4.2 & 6.1.1 and District Rule 4351, 4.2 & 6.1.2], [Federally Enforceable Through Title V]

## Initial TV Permit

15. Operator of units simultaneously firing gaseous and liquid fuels shall install and maintain totalizing mass or volumetric flow rate meters in each fuel line to each unit. Volumetric flow rate meters shall be installed in conjunction with temperature and pressure measurement devices. [District Rule 4305, 5.3.1 and District Rule 4351, 5.6.1], [Federally Enforceable Through Title V]
16. Operator shall monitor and record for each unit the hhv and cumulative annual use of each fuel. [District Rule 4305, 6.1.1 and District Rule 4351, 6.1.1], [Federally Enforceable Through Title V]
17. If the unit is fired on noncertified diesel fuel, then the sulfur content of the fuel being fired in the unit shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. The sulfur content of each fuel source shall be tested weekly, except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
18. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, labeled and records kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
19. Pump and compressor seals shall operated free of leaks (as defined by Rule 4452), inspected, labeled and records kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
20. 12.6 MMBtu/hr splitter reboiler heater and 7.4 MMBtu/hr charge heater emission rates shall not exceed any of the following: NO<sub>x</sub> (as NO<sub>2</sub>) 0.18 ppmv or 147 ppmv @ 3% O<sub>2</sub>, or CO: 400 ppmvd @ 3% O<sub>2</sub>. [District Rule 4305 and 4351], [Federally Enforceable Through Title V]
21. Maximum rated heat input of reboiler stripper heater shall not exceed 5.0 MMBtu/hr. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
22. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081], [Federally Enforceable Through Title V]
23. Splitter reboiler heater and charge heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081], [Federally Enforceable Through Title V]
24. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
25. Annual test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NO<sub>x</sub> limits of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO<sub>x</sub> emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2 and 4351, 6.3], [Federally Enforceable Through Title V]
26. The following conditions must be met for representative unit(s) to be used to demonstrate compliance for NO<sub>x</sub> limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.4.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
27. All units in a group for which representative units are source tested to demonstrate compliance for NO<sub>x</sub> limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
28. All units in a group for which representative units are source tested to demonstrate compliance for NO<sub>x</sub> limits of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.4.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
29. The number of representative units source tested to demonstrate compliance for NO<sub>x</sub> limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
30. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
32. Permittee shall maintain records of hhv of fuel burned and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4351], [Federally Enforceable Through Title V]

## **Initial TV Permit**

33. The permittee shall conduct daily inspections of process heater tubes, refractory and burner operation and monthly visible emission (VE) evaluations by ARB certified VE reader pursuant to EPA Method 9. [District Rule 4305], [Federally Enforceable Through Title V]
34. The permittee shall maintain records of dates and times of process heater inspections and visible emission evaluations. These records shall be retained at the premises for a period of no less than five years and shall be made available for District inspection upon request. [District Rules 4305, 4351], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-4-5

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

51.5 MMBTU/HR PLATFORMER UNIT INCLUDING SEPARATOR, ADSORBER, 3 REACTORS, 4 FT. DIA. STABILIZER TOWER, ACCUMULATORS, 17.1 MMBTU/HR CHARGE HEATER #1, 8.9 MMBTU/HR CHARGE HEATER #2, 5.9 MMBTU/HR CHARGE HEATER #3, 5.5 MMBTU/HR STABILIZER REBOILER HEATER, AND 14.1 MMBTU/HR SPLITTER REBOILER HEATER.

## **PERMIT UNIT REQUIREMENTS**

1. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)], [Federally Enforceable Through Title V]
2. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO<sub>2</sub> at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
4. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 12 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
5. Nitrogen oxide (NO<sub>x</sub>) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO<sub>2</sub>/MMBtu of heat input (hvh). [District Rule 4305, 5.0, 8.2 and 4351, 8.1], [Federally Enforceable Through Title V]
6. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed: A) 0.036 lb NO<sub>x</sub>/MMBtu or 30 ppmv when unit is gaseous fuel fired, B) 0.052 lb NO<sub>x</sub>/MMBtu or 40 ppmv when unit is liquid fuel fired, C) lower NO<sub>x</sub> limit of the two fuels being fired simultaneously for dual fired units. [District Rule 4351, 5.2.2 and 5.4 and /or District Rule 4305, 5.1 and subsumed District Rule 4301 and Kern County Rule 408], [Federally Enforceable Through Title V]
7. NO<sub>x</sub> requirements shall not apply during natural gas curtailments to units burning liquid fuel that are normally fired with gaseous fuel. This exemption is limited to 336 cumulative hours of operation per calendar year excluding equipment testing not to exceed 48 hours per calendar year. Any unit so exempted shall monitor and record for each unit the cumulative annual hours of operation on each liquid during curtailment and during testing. [District Rule 4305, 4.2 & 6.1.1 and /or District Rule 4351, 4.2 & 6.1.2], [Federally Enforceable Through Title V]
8. Operator of units simultaneously firing gaseous and liquid fuels shall install and maintain totalizing mass or volumetric flow rate meters in each fuel line to each unit. Volumetric flow rate meters shall be installed in conjunction with temperature and pressure measurement devices. [District Rule 4305, 5.3.1 and District Rule 4351, 5.6.1], [Federally Enforceable Through Title V]
9. Operator shall monitor and record for each unit the hvh and cumulative annual use of each fuel. [District Rule 4305, 6.1.1 and District Rule 4351, 6.1.1], [Federally Enforceable Through Title V]
10. 14.1 MM Btu/hr splitter reboiler process heater shall be equipped with John Zink PSMR and shall be fired exclusively on PUC or FERC regulated natural gas. [District NSR Rule and District Rules 4305 and 4351], [Federally Enforceable Through Title V]
11. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801], [Federally Enforceable Through Title V]
13. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas, certified diesel fuel with a sulfur content of no more than 0.5% by weight, or refinery gas with a sulfur content of no more than 10,000 ppmv or 1% by weight according to the H<sub>2</sub>S monitor installed downstream of the sulfur recovery unit. [District Rules 4301, 4801 and 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

14. Pump and compressor seals shall operated free of leaks (as defined by Rule 4452), inspected, labeled and records kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
15. Emission rates from the 17.1 MMBtu/hr charge heater #1, 8.9 MMBtu charge heater #2, 5.9 MMBTU/hr charge heater #3, 5.5 MMBtu/hr stabilizer reboiler heater shall not exceed any of the following: NOx (as NO<sub>2</sub>) 0.18 lb/MMBtu or 147 ppmv @ 3% O<sub>2</sub>, or CO: 400 ppmvd @ 3% O<sub>2</sub>. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
16. Emission rates for the 14.1 MMBtu/hr splitter reboiler heater shall not exceed: PM<sub>10</sub>: 0.005 lb/MMBtu; SOx (as SO<sub>2</sub>): 0.0006 lb/MMBtu; NOx (as NO<sub>2</sub>): 0.036 lb/MMBtu or 30 ppmv @3% O<sub>2</sub>; VOC: 0.0028 lb/MMBtu; or CO: 239 ppmvd @ 3% O<sub>2</sub>. [District NSR Rule and District Rules 4305 and 4351], [Federally Enforceable Through Title V]
17. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081], [Federally Enforceable Through Title V]
18. Process heaters exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081], [Federally Enforceable Through Title V]
19. Source testing to measure process heater NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
20. Source testing to demonstrate compliance with NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
21. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
22. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
23. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
25. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
26. During the source test, emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
27. Permittee shall maintain records of hhv of fuel burned and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4351], [Federally Enforceable Through Title V]
28. For the 14.1 MMBtu/hr splitter reboiler process heater, stack concentrations of NOx (as NO<sub>2</sub>), CO, and O<sub>2</sub> shall be measured at least on a monthly basis using District approved portable analyzers. In-stack O<sub>2</sub> monitors are acceptable for O<sub>2</sub> measurement. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
29. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the allowable emissions rate, the permittee shall notify the District and return the NOx and CO concentrations to the allowable emissions rate as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the allowable emissions rate after one hour, the permittee shall conduct an emissions test within 60 days, utilizing District approved test methods, to determine compliance with the applicable emissions limits. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
30. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
31. The permittee shall maintain records of the date and time of NOx, CO, and O<sub>2</sub> measurements, the measured NO<sub>2</sub> and CO concentrations corrected to 3% O<sub>2</sub>, and the O<sub>2</sub> concentration. The records must also include a description of any corrective action taken to maintain the emissions within an acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made available for District inspection upon request. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
32. For charge heater #1, charge heater #2, charge heater #3, and stabilizer reboiler heater the permittee shall conduct daily inspections of process heater tubes, refractory and burner operation and monthly visible emission (VE) evaluations by ARB certified VE reader pursuant to EPA Method 9. [District Rule 4305], [Federally Enforceable Through Title V]

## Initial TV Permit

33. The permittee shall maintain records of dates and times of process heater inspections and visible emission evaluations. These records shall be retained at the premises for a period of no less than five years and shall be made available for District inspection upon request. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]



## Initial TV Permit

### San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-5-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

LIQUID-LIQUID MEROX SWEETENING UNIT INCLUDING MIXER, CAUSTIC SETTLER, CATALYST INJECTION PORT, AND ASSOCIATED PUMPS AND PIPING

## PERMIT UNIT REQUIREMENTS

---

1. Sulfur compound emissions shall not exceed 2000 ppmv as SO<sub>2</sub>. [District Rule 4801], [Federally Enforceable Through Title V]
2. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]

**Initial TV Permit**  
**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-6-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

49.0 MMBTU/HR COEN, MODEL #D-57, NATURAL GAS-FIRED INDUCED DRAFT WATER TUBE BOILER #6  
REPLACEMENT STANDBY UNIT FOR S-37-11

## **PERMIT UNIT REQUIREMENTS**

1. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)], [Federally Enforceable Through Title V]
2. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO<sub>2</sub> at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
4. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 12 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
5. Nitrogen oxide (NO<sub>x</sub>) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO<sub>2</sub>/MMBtu of heat input (hmv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1], [Federally Enforceable Through Title V]
6. NO<sub>x</sub> requirements shall not apply during natural gas curtailments to units burning liquid fuel that are normally fired with gaseous fuel. This exemption is limited to 336 cumulative hours of operation per calendar year excluding equipment testing not to exceed 48 hours per calendar year. Any unit so exempted shall monitor and record for each unit the cumulative annual hours of operation on each liquid during curtailment and during testing. [District Rule 4305, 4.2 & 6.1.1 and /or District Rule 4351, 4.2 & 6.1.2], [Federally Enforceable Through Title V]
7. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
8. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801], [Federally Enforceable Through Title V]
9. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas, certified diesel fuel with a sulfur content of no more than 0.5% by weight, or refinery gas with a sulfur content of no more than 10,000 ppmv or 1% by weight according to the H<sub>2</sub>S monitor installed downstream of the sulfur recovery unit. [District Rules 4301, 4801 and 2520, 9.3.2], [Federally Enforceable Through Title V]
10. Total combined steam production shall not exceed 80,000 lb/hr from this unit and unit S-37-11. [District NSR Rule], [Federally Enforceable Through Title V]
11. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, labeled and records kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
12. Pump and compressor seals shall operated free of leaks (as defined by Rule 4452), inspected, labeled and records kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
13. Boiler shall operate as a replacement standby unit for S-37-11 (boiler No. 9). Simultaneous operation of the replacement standby unit (S-37-6) and the primary unit (S-37-11) shall not occur except during start-up or shutdown of the primary unit (S-37-11). [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
14. Boiler heat input shall not exceed 90 billion Btu in any calendar year. [District Rules 4305], [Federally Enforceable Through Title V]
15. The boiler shall be either tuned at least once each calendar year in which it operates by a qualified technician in accordance with Rule 4304, or operated with exhaust oxygen concentration no greater than 3.00% by volume on a dry basis. [District Rule 4351], [Federally Enforceable Through Title V]

## Initial TV Permit

16. Boiler shall be operated in accordance with the manufacturer's recommendations. [District Rule 4305], [Federally Enforceable Through Title V]
17. Emission rates for this unit shall not exceed any of the following: NOx (as NO2): 95 ppmv @ 3% O2 or 0.10 lb/MMBtu or ; or CO: 400 ppmv @ 3% O2. [District Rule 4351], [Federally Enforceable Through Title V]
18. Permittee shall maintain records of fuel type and hvh, fuel use per calendar year, and hourly steam production rate for S-37-6 and S-37-11 for a period of five years and shall make such records readily available for District inspection upon request. [District NSR Rule and District Rules 4305 and 4351], [Federally Enforceable Through Title V]
19. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
20. If fired only on gaseous fuel, source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
21. If permittee fires unit on non-gaseous fuel or fails any compliance demonstration for NOx or CO emission limits, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
22. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
23. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081], [Federally Enforceable Through Title V]
24. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
26. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081 and 4351], [Federally Enforceable Through Title V]
27. During the source test, emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
28. Annual test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2 and 4351, 6.3], [Federally Enforceable Through Title V]
29. The following conditions must be met for representative unit(s) to be used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
30. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
31. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
32. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-7-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

112,500 BTU/HR FLARE WITH STEAM ASSIST

## PERMIT UNIT REQUIREMENTS

1. Visible emissions monitoring shall be conducted at least annually, using EPA Method 22. [40CFR 60.18(f)(1)], [Federally Enforceable Through Title V]
2. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2 and 40CFR 60.18(c)(2)], [Federally Enforceable Through Title V]
3. The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3 and 40CFR 60.18(f)(2)], [Federally Enforceable Through Title V]
4. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4 and 40CFR 60.18(f)(2)], [Federally Enforceable Through Title V]
5. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5], [Federally Enforceable Through Title V]
6. Open flares in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6], [Federally Enforceable Through Title V]
7. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 40CFR 60.18(d)], [Federally Enforceable Through Title V]
8. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)], [Federally Enforceable Through Title V]
9. Air-assisted or steam-assisted flares shall only be used when the net heating value of the gas being combusted is 300 Btu/scf or greater. Nonassisted flares shall only be used when the net heating value of the gas being combusted is 200 Btu/scf or greater. [40 CFR 60.18 (c)(3)(ii)], [Federally Enforceable Through Title V]
10. Steam-assisted and nonassisted flares shall be operated with an exit velocity less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)], [Federally Enforceable Through Title V]
11. Steam-assisted and nonassisted flares may be operated with an exit velocity equal to or greater than 60 ft/sec, but less than 400 ft/sec, if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)], [Federally Enforceable Through Title V]
12. Steam-assisted and nonassisted flares may be operated with an exit velocity less than the velocity Vmax, as determined by the methods specified in 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)], [Federally Enforceable Through Title V]
13. The net heating value of the gas being combusted the flare shall be calculated pursuant to 40 CFR 60.18(f)(3) or by using EPA Method 18, ASTM D1946, and ASTM D2382 if published values are not available or cannot be calculated. [40 CFR 60.18 (f)(3)], [Federally Enforceable Through Title V]
14. Sulfur content (as H2S) of fuel gas, as defined in Rule 4001 Subpart J, burned in flare shall not exceed 0.10 gr/dscf. [40 CFR 60, Subpart J], [Federally Enforceable Through Title V]
15. Continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, Subpart J], [Federally Enforceable Through Title V]

## Initial TV Permit

16. Flare gas bypass compressors shall be designated, as described in section 60.486(e) (1) and (2) for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. The reading shall be measured by the methods specified in section 60.485(c). Compressors shall be tested initially, annually thereafter, and at other times as requested by the District. [District Rule 4001, Subpart GGG], [Federally Enforceable Through Title V]
17. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]
18. Operator shall report all rolling 3-hour periods during which the average concentration of H<sub>2</sub>S as measured by the H<sub>2</sub>S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm). [40 CFR Part 60, subpart J, 60.105(e)(3)(ii)], [Federally Enforceable Through Title V]
19. Operator shall determine compliance with the H<sub>2</sub>S standard using EPA Method 11. [40 CFR Part 60, subpart J, 60.106(e)], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-8-9

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

230 HP GASOLINE LOADING AREA AND REFINERY VAPOR RECOVERY SYSTEM INCLUDING: GASOLINE LOADING RACK AND DIESEL LOADING RACK

## **PERMIT UNIT REQUIREMENTS**

1. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid with greatest vapor pressure loaded. [District Rules 4624, 5.1.1 and NSR Rule, and Kern County Rule 413], [Federally Enforceable Through Title V]
2. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.2 and Kern County Rule 413], [Federally Enforceable Through Title V]
3. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621, 5.1.1], [Federally Enforceable Through Title V]
4. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621, 5.1.2], [Federally Enforceable Through Title V]
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4621, 5.2.2 and 4624, 5.3], [Federally Enforceable Through Title V]
6. No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004], [Federally Enforceable Through Title V]
7. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be EPA Method 27. [District Rule 4621, 6.2.3], [Federally Enforceable Through Title V]
8. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5], [Federally Enforceable Through Title V]
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4, Kern County Rule 413], [Federally Enforceable Through Title V]
10. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm during any month that the loading arm(s) are in operation. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
13. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired), and E) inspector name and signature. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
14. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.2, and Kern County Rule 413], [Federally Enforceable Through Title V]
15. VOC emissions from the vapor collection and control system shall be determined annually using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624, 6.2.2, and Kern County Rule 413], [Federally Enforceable Through Title V]
16. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1], [Federally Enforceable Through Title V]
17. Gasoline loading rack shall include 7 loading arms and 5 vapor return hoses. [District NSR Rule], [Federally Enforceable Through Title V]
18. Diesel loading rack shall include 4 loading arms and 2 vapor return hoses connected to diesel storage tanks #20000 and #55002. [District NSR Rule], [Federally Enforceable Through Title V]
19. Refinery vapor control system shall include the following: 60 HP vapor compressor, G-fin aftercooler, vapor knockout pot, sump box, sump pump and refinery fuel gas drum, and vapor piping from tank #5008 (S-37-23). [District NSR Rule], [Federally Enforceable Through Title V]
20. The loading and vapor collection equipment shall be maintained and operated such that there are no leaks (as defined in Rule 4624) or excess organic liquid drainage at disconnections. [District Rule 4624], [Federally Enforceable Through Title V]
21. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
22. Pump seals shall be operated free of leaks (as defined by Rule 4452), inspected, and labeled. Records shall be kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
23. Equipment under vapor control shall not vent to atmosphere. [District NSR Rule and Rule 4624], [Federally Enforceable Through Title V]
24. Diesel vapor control hoses shall be of dry break type to close off petroleum vapor lines upon disconnection. [District NSR Rule and Rule 4624], [Federally Enforceable Through Title V]
25. The diesel vapor control hoses shall be used to recover gasoline vapor from delivery vessel in gasoline service whenever it is refilled with diesel. [District NSR Rule and Rule 4624], [Federally Enforceable Through Title V]
26. Vapor valves and flanges shall be operated and maintained in a leak-free condition, with leakage no greater than 10,000 ppm VOC above background as measured within one centimeter with portable detector. [District Rules 4624 and 4451], [Federally Enforceable Through Title V]
27. VOC emission rate from diesel loading rack shall not exceed any of the following: Fugitive emissions: 0.12 lb/hr and vapor recovery system: 0.09 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-9-8

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

OIL/WATER SEPARATION OPERATION INCLUDING API SEPARATOR, CORRUGATED PLATE SEPARATOR, INDUCED AIR FLOATATION UNIT, DRAIN PIT, 4 FILTERS, STRIPPING COLUMN, CARBON ADSORPTION, (3) 5,000 BBL STORAGE TANKS (#5061, 5062, AND 5063), (2) 5,000 BBL WASTE WATER TANKS (#10003 AND #10004), AND WASTE WATER STORAGE TANK #55000.

## PERMIT UNIT REQUIREMENTS

---

1. Varc breather vent shall be set at the following settings: 3.0 in. w.c. pressure and 0.865 in. w.c. vacuum. [District NSR Rule], [Federally Enforceable Through Title V]
2. All access openings, gauge hatches, etc., with the exception of the third compartment of the API separator, shall be equipped with covers and maintained free of leaks (as defined by Rule 4451). [District NSR Rule], [Federally Enforceable Through Title V]
3. Wastewater stripper system and carbon adsorption unit shall be maintained according to manufacturer's recommendations. [District NSR Rule], [Federally Enforceable Through Title V]
4. Clean water tanks shall not be a source of air contaminant emissions. [District NSR Rule], [Federally Enforceable Through Title V]
5. Vapor space of oil/water separators shall not be purged unless vapors are directed to a control device. [District NSR Rule], [Federally Enforceable Through Title V]
6. Roof seal, access doors and other openings shall be checked by visible inspection semiannually to ensure no cracks or gaps occur between the roof and wall, and that access doors and other openings are closed and gasketed properly. [District Rule 4623]
7. A person shall not use any compartment of any vessel or device operated for the recovery of oil from effluent water from any equipment which processes, refines, stores or handles petroleum products, except for air flotation units, unless such compartments are equipped with one of the following vapor loss control devices: a solid cover with all openings sealed and totally enclosing the liquid contents, except for structurally necessary breathing vents; a flotation pontoon or double deck-type cover as specified in Rule 4625, Section 5.1.2 (version 12/17/92); or a vapor recovery system with a combined collection and control efficiency of at least 90% by weight. [District Rule 4625], [Federally Enforceable Through Title V]
8. A leak as defined in Rule 4451 is dripping at a rate of more than three (3) drops per minute of liquid containing VOCs or a reading as methane in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source in accordance with EPA Method 21. [District NSR Rule], [Federally Enforceable Through Title V]
9. Drain pit with forebay shall be equipped with solid leak free (as defined in Rule 4451) covers. [District NSR Rule and Rule 4625], [Federally Enforceable Through Title V]
10. Granular media filters and cartridge filters shall be enclosed in leak free (as defined by Rule 4451) pressure vessels. [District NSR Rule 2201], [Federally Enforceable Through Title V]
11. Stripping column, blower, 100,000 Btu/hr steam heater and carbon adsorption unit shall be maintained in a leak free (as defined by Rule 4451) manner (except when replacing carbon) and not vented to the atmosphere. [District Rule 2201], [Federally Enforceable Through Title V]
12. Sampling ports shall remain closed at all times except during gauging or sampling. [District Rule 4625], [Federally Enforceable Through Title V]
13. Skimmed oil removed from skim tank shall be transferred to crude oil charge tanks or to other tank(s) under vapor control with at least 90% control efficiency by weight. [District Rule 4625], [Federally Enforceable Through Title V]



**Initial TV Permit**  
**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-10-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

500 GALLON BLOWDOWN RECEIVING SYSTEM INCLUDING HORIZONTAL CAUSTIC BUBBLER SCRUBBER WITH STACK, DROP OUT PIT WITH COVER AND PIPING TO DROP OUT VESSEL

## **PERMIT UNIT REQUIREMENTS**

- 
1. Drop out pit and caustic vessel shall not be used to store petroleum liquids on a regular basis. [District Rule 2201], [Federally Enforceable Through Title V]
  2. Drop out pit cover inspection door and suction pump opening shall be vapor-tight. [District Rule 2201], [Federally Enforceable Through Title V]
  3. Cover to the drop out pit shall be sealed with asbestos rope around its perimeter, and bolted to the top of the existing concrete pit. [District Rule 2201], [Federally Enforceable Through Title V]
  4. Vapors from the drop out vessel and drop out pit shall be vented to caustic vessel only. [District Rule 2201], [Federally Enforceable Through Title V]
  5. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-11-8

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

65.0 MMBTU/HR OIL/GAS FIRED ERIE CITY IRON WORKS MODEL #12M KEYSTONE BOILER (#9) WITH MODEL #SAGO BURNER

**PERMIT UNIT REQUIREMENTS**

1. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)], [Federally Enforceable Through Title V]
2. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO<sub>2</sub> at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
4. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801], [Federally Enforceable Through Title V]
6. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas or certified diesel fuel with a sulfur content of no more than 0.5% by weight. [District Rules 4301, 4801 and 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Nitrogen oxide (NO<sub>x</sub>) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO<sub>2</sub>/MMBtu of heat input (hmv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1], [Federally Enforceable Through Title V]
8. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed: A) 0.036 lb NO<sub>x</sub>/MMBtu or 30 ppmv when unit is gaseous fuel fired, B) 0.052 lb NO<sub>x</sub>/MMBtu or 40 ppmv when unit is liquid fuel fired, C) lower NO<sub>x</sub> limit of the two fuels being fired simultaneously for dual fired units. [District Rule 4351, 5.2.2 and 5.4 and District Rule 4305, 5.1 and subsumed District Rule 4301 and Kern County Rule 408], [Federally Enforceable Through Title V]
9. NO<sub>x</sub> requirements shall not apply during natural gas curtailments to units burning liquid fuel that are normally fired with gaseous fuel. This exemption is limited to 336 cumulative hours of operation per calendar year excluding equipment testing not to exceed 48 hours per calendar year. Any unit so exempted shall monitor and record for each unit the cumulative annual hours of operation on each liquid during curtailment and during testing. [District Rule 4305, 4.2 & 6.1.1 and /or District Rule 4351, 4.2 & 6.1.2], [Federally Enforceable Through Title V]
10. Operator of units simultaneously firing gaseous and liquid fuels shall install and maintain totalizing mass or volumetric flow rate meters in each fuel line to each unit. Volumetric flow rate meters shall be installed in conjunction with temperature and pressure measurement devices. [District Rule 4305, 5.3.1 and District Rule 4351, 5.6.1], [Federally Enforceable Through Title V]
11. Operator shall monitor and record for each unit the hmv and cumulative annual use of each fuel. [District Rule 4305, 6.1.1 and District Rule 4351, 6.1.1], [Federally Enforceable Through Title V]
12. Total combined steam production from this unit, boiler #6 (S-37-6) and boiler #7 (S-37-11) shall not exceed 80,000 lbs/hr. [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall comply with all testing, recordkeeping, and reporting requirements specified in 40 CFR Part 60, Subpart Dc. [District NSR Rule], [Federally Enforceable Through Title V]
14. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, labeled and records kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
15. Pump and compressor seals shall operated free of leaks (as defined by Rule 4452), inspected, labeled and records kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]

## Initial TV Permit

16. Boiler shall be equipped with operational fuel oil flowrate measuring and recording monitor, oil preheat temperature gauge, and oil supply pressure gauge. [District NSR Rule], [Federally Enforceable Through Title V]
17. Emission rates shall not exceed any of the following when gas-firing: PM10: 0.014 lb/MMBtu, NOx: (as NO2): 30 ppmv @ 3% O2 or 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, or CO: 176 ppmv @ 3% O2. [District NSR Rule, District Rules 4305 and 4351], [Federally Enforceable Through Title V]
18. Emission rates shall not exceed any of the following when oil-firing: PM10: 2 lb/1000 gal, NOx (as NO2): 55 lb/1000 gal, VOC: 0.3 lb/1000 gal, or CO: 5 lb/1000 gal. [District NSR Rule], [Federally Enforceable Through Title V]
19. The unit shall be fired exclusively on gas except during natural gas curtailments for no more than 336 hrs in a calendar year and for equipment testing for no more than 48 hrs in a calendar year. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
20. The boiler shall only be fired on natural gas with gas sulfur content not to exceed 0.75 gr/100 scf or No. 2 fuel oil with sulfur content not to exceed 0.5% by weight, no refinery fuel gas shall be combusted. [District NSR Rule], [Federally Enforceable Through Title V]
21. Fuel oil supply pressure shall not be less than 150 psig and shall not exceed 200 psig. [District NSR Rule], [Federally Enforceable Through Title V]
22. Boiler stack concentrations of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. In-stack O2 monitors are acceptable for O2 measurement. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
23. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the allowable emissions rate, the permittee shall notify the District and return the NOx and CO concentrations to the allowable emissions rate as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the allowable emissions rate after one hour, the permittee shall conduct an emissions test within 60 days, utilizing District approved test methods, to determine compliance with the applicable emissions limits. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
24. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
25. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records must also include a description of any corrective action taken to maintain the emissions within an acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made available for District inspection upon request. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
26. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081], [Federally Enforceable Through Title V]
27. Process heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081], [Federally Enforceable Through Title V]
28. Permittee shall maintain records of fuel type and hhv, daily and annual fuel use (per calendar year), and hourly steam production rate for S-37-6 and S-37-11 for a period of five years, and shall make such records readily available for District inspection upon request. [District NSR Rule and District Rules 4305 and 4351], [Federally Enforceable Through Title V]
29. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
30. If fired only on gaseous fuel, source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
31. If permittee fires unit on non-gaseous fuel or fails any compliance demonstration for NOx or CO emission limits, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
32. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
34. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
35. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081 and 4351], [Federally Enforceable Through Title V]

## Initial TV Permit

36. During the source test, emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
37. Annual test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2 and 4351, 6.3], [Federally Enforceable Through Title V]
38. The following conditions must be met for representative unit(s) to be used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
39. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
40. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
41. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-12-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5009 WITH VAPOR RECOVERY

## PERMIT UNIT REQUIREMENTS

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40CFR 60.112 (a)], [Federally Enforceable Through Title V]
3. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-13-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5010 WITH VAPOR RECOVERY

## PERMIT UNIT REQUIREMENTS

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
3. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]



## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-14-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5011 WITH VAPOR RECOVERY

## PERMIT UNIT REQUIREMENTS

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
3. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-15-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5020 WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
3. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-16-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

504,000 GALLON FLOATING ROOF TANK #12000

## PERMIT UNIT REQUIREMENTS

1. Permittee shall comply with all applicable provisions of Rule 4623. [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
3. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
4. Gap between tank shell and primary seal shall not exceed: 1) One and one-half (1-1/2) inches for a metallic-shoe-type seal on welded tanks; 2) Two and one-half (2-1/2) inches for a metallic-shoe-type seal on riveted tanks; and 3) One-half (1/2) inch for a resilient toroid type seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
5. If this unit is a welded tank with a metallic-shoe-type seal, then the cumulative length of all gaps, between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
6. If this unit is a riveted tank with a metallic-shoe-type seal, then the cumulative length of all gaps, between the tank shell and the primary seal: 1) Greater than one and one-half (1-1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
7. If this unit has a resilient toroid type seal, no gap between the tank shell and the primary seal shall exceed one-half (1/2) inch. The cumulative length of all gaps between the tank shell and the primary seal greater than one-eighth (1/8) inch shall not exceed 30 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
8. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
9. Gap between the tank shell and secondary seal shall not exceed one-half (1/2) inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
10. Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
11. If the primary seal used is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
12. Primary seal enveloped surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe and seal fabric shall have no openings, holes or tears. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
13. Secondary seal shall have no openings, holes or tears. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
14. If the primary seal used is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
15. If this unit is a welded tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
16. If this unit is a riveted tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to two and one-half (2-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
17. If this unit has a resilient toroid type seal, the secondary seal shall allow easy insertion of probes up to one-half (1/2) inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
18. Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]

## Initial TV Permit

19. Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
20. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
21. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
22. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
23. Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, maximum true vapor pressure, and the Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
24. Total vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
25. Total vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
27. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
28. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-17-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

504,000 GALLON FLOATING ROOF STORAGE TANK #12001

## PERMIT UNIT REQUIREMENTS

1. Permittee shall comply with all applicable provisions of Rule 4623. [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
3. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
4. Gap between tank shell and primary seal shall not exceed: 1) One and one-half (1-1/2) inches for a metallic-shoe-type seal on welded tanks; 2) Two and one-half (2-1/2) inches for a metallic-shoe-type seal on riveted tanks; and 3) One-half (1/2) inch for a resilient toroid type seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
5. If this unit is a welded tank with a metallic-shoe-type seal, then the cumulative length of all gaps, between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
6. If this unit is a riveted tank with a metallic-shoe-type seal, then the cumulative length of all gaps, between the tank shell and the primary seal: 1) Greater than one and one-half (1-1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
7. If this unit has a resilient toroid type seal, no gap between the tank shell and the primary seal shall exceed one-half (1/2) inch. The cumulative length of all gaps between the tank shell and the primary seal greater than one-eighth (1/8) inch shall not exceed 30 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
8. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
9. Gap between the tank shell and secondary seal shall not exceed one-half (1/2) inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
10. Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
11. If the primary seal used is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
12. Primary seal enveloped surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe and seal fabric shall have no openings, holes or tears. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
13. Secondary seal shall have no openings, holes or tears. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
14. If the primary seal used is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
15. If this unit is a welded tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
16. If this unit is a riveted tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to two and one-half (2-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
17. If this unit has a resilient toroid type seal, the secondary seal shall allow easy insertion of probes up to one-half (1/2) inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
18. Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]

## Initial TV Permit

19. Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
20. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
21. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
22. Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, maximum true vapor pressure, and the Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
23. Total vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
24. Total vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
25. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
27. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
28. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]



## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-18-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

420,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #10007 WITH VAPOR RECOVERY

## PERMIT UNIT REQUIREMENTS

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
3. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-19-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

420,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #10008 WITH VAPOR RECOVERY

## PERMIT UNIT REQUIREMENTS

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
3. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-20-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

420,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #10001 WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
3. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-21-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5006.

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of any liquid placed, stored, or held in this tank shall not exceed 1.50 psia at introduction or storage temperature. [District NSR Rule, Rule 2520, 9.1, 4623, 2.0 and 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 1,100 barrels per day. [District NSR Rule], [Federally Enforceable Through Title V]
3. Tank shall be equipped with a pressure/vacuum vent hatch set to within 10% of the maximum tank working pressure. [District NSR Rule], [Federally Enforceable Through Title V]
4. Permittee shall keep accurate records of true vapor pressure (TVP) and daily liquid throughput, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 1070 and Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
5. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1], [Federally Enforceable Through Title V]
9. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
10. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
12. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
13. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-22-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5007.

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of any liquid placed, stored, or held in this tank shall not exceed 1.50 psia at introduction or storage temperature. [District NSR Rule, Rule 2520, 9.1, 4623, 2.0 and 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 1,100 barrels per day. [District NSR Rule], [Federally Enforceable Through Title V]
3. Tank shall be equipped with a pressure/vacuum vent hatch set to within 10% of the maximum tank working pressure. [District NSR Rule], [Federally Enforceable Through Title V]
4. Permittee shall keep accurate records of true vapor pressure (TVP) and daily liquid throughput, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 1070 and Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
5. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1], [Federally Enforceable Through Title V]
9. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
10. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
12. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
13. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]



**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-23-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5008 SERVED BY REFINERY VAPOR CONTROL SYSTEM LISTED ON S-37-8

## **PERMIT UNIT REQUIREMENTS**

1. True vapor pressure of liquids stored shall not exceed 1.5 psia. [District NSR Rule, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District NSR Rule & 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
3. Pressure relief valve shall open at a pressure higher than compressor activation pressure of vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]
4. Tankage VOC vapor shall not be vented to atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
5. Tank shall be equipped with operational stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
6. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
7. The permittee shall comply with all applicable notification, recordkeeping and monitoring requirements of Rule 4001. [District Rule 4001], [Federally Enforceable Through Title V]
8. If the Reid vapor pressure is greater than or equal to 1.0 psia, or the maximum true vapor pressure of the petroleum liquid is greater than or equal to 1.0 psia, then operator shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [40 CFR 60.113(a)], [Federally Enforceable Through Title V]
9. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.113(b)], [Federally Enforceable Through Title V]
10. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.113(c)], [Federally Enforceable Through Title V]
11. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
12. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
13. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
14. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
15. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-24-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3014.

## **PERMIT UNIT REQUIREMENTS**

---

1. True vapor pressure of liquids placed, stored, or held in this tank shall not exceed 1.5 psi. [District Rule 4623, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
2. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. If the Reid vapor pressure is greater than or equal to 1.0 psia, or the maximum true vapor pressure of the petroleum liquid is greater than or equal to 1.0 psia, then operator shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [40 CFR 60.113(a)], [Federally Enforceable Through Title V]
4. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.113(b)], [Federally Enforceable Through Title V]
5. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.113(c)], [Federally Enforceable Through Title V]
6. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
9. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
10. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-25-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3026.

## **PERMIT UNIT REQUIREMENTS**

---

1. True vapor pressure of liquids placed, stored, or held in this tank shall not exceed 1.5 psi. [District Rule 4623, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
2. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. If the Reid vapor pressure is greater than or equal to 1.0 psia, or the maximum true vapor pressure of the petroleum liquid is greater than or equal to 1.0 psia, then operator shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [40 CFR 60.113(a)], [Federally Enforceable Through Title V]
4. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.113(b)], [Federally Enforceable Through Title V]
5. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.113(c)], [Federally Enforceable Through Title V]
6. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
9. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
10. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-26-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3027.

## **PERMIT UNIT REQUIREMENTS**

---

1. True vapor pressure of liquids placed, stored, or held in this tank shall not exceed 1.5 psi. [District Rule 4623, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
2. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
3. If the Reid vapor pressure is greater than or equal to 1.0 psia, or the maximum true vapor pressure of the petroleum liquid is greater than or equal to 1.0 psia, then operator shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [40 CFR 60.113(a)], [Federally Enforceable Through Title V]
4. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.113(b)], [Federally Enforceable Through Title V]
5. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.113(c)], [Federally Enforceable Through Title V]
6. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
9. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
10. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-27-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

1,554,000 GALLON INTERNAL FLOATING CRUDE OIL STORAGE TANK #37,000 WITH ALTECH INDUSTRIES INTERNAL FLOATING ROOF

## PERMIT UNIT REQUIREMENTS

1. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
2. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
3. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
4. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
5. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
6. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
7. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
8. The maximum gap between the shoe and the tank shell shall be no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
9. There shall be no tears, holes or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
10. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
11. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
12. Pressure-vacuum valves shall be set to within ten (10) percent of the maximum allowable working pressure of the roof. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
13. All roof openings used for sampling and gauging, except pressure vacuum valves, shall be closed at all times, with no visible gaps and be gas-tight (as defined in Rule 4623), except when the roof opening is in use. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
14. All openings in the tank roof shall be provided with a projection below the liquid surface to prevent belching of liquid and to prevent entrained organic vapor from escaping from the liquid contents of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
15. Any roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least 90% of the area of the opening. [District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
16. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 4623, 6.1 and 2520, 9.4.2], [Federally Enforceable Through Title V]
17. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
18. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

## Initial TV Permit

19. Total vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
20. Total vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
23. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-28-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

3,360,000 GALLON INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #80,000 WITH ALTECH INDUSTRIES  
INTERNAL FLOATING ROOF

## PERMIT UNIT REQUIREMENTS

1. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
2. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
3. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
4. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
5. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
6. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
7. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
8. The maximum gap between the shoe and the tank shell shall be no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
9. There shall be no tears, holes or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
10. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
11. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
12. Pressure-vacuum valves shall be set to within ten (10) percent of the maximum allowable working pressure of the roof. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
13. All roof openings used for sampling and gauging, except pressure vacuum valves, shall be closed at all times, with no visible gaps and be gas-tight (as defined in Rule 4623), except when the roof opening is in use. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
14. All openings in the tank roof shall be provided with a projection below the liquid surface to prevent belching of liquid and to prevent entrained organic vapor from escaping from the liquid contents of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
15. Any roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least 90% of the area of the opening. [District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
16. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 4623, 6.1 and 2520, 9.4.2], [Federally Enforceable Through Title V]
17. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
18. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

## Initial TV Permit

19. Total vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
20. Total vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
23. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]



## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-31-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #1000 WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

---

1. Reid vapor pressure (RVP) of liquids stored in tank shall not exceed 0.75 psi. [District NSR Rule], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 1,370 bbl/day. [District NSR Rule], [Federally Enforceable Through Title V]
3. Storage temperature of liquid stored shall not exceed 150 degrees F. [District NSR Rule], [Federally Enforceable Through Title V]
4. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 99%. [District NSR Rule], [Federally Enforceable Through Title V]
5. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
6. There shall be no VOC emission from manway seals except when sampling or when maintenance is performed. [District Rule 4623], [Federally Enforceable Through Title V]
7. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
8. Tank pressure relief valve shall be set at no less than 1.73 inches H<sub>2</sub>O. [District NSR Rule], [Federally Enforceable Through Title V]
9. Vapor control system shall operate between 0.1 inches H<sub>2</sub>O vacuum and 0.3 inches H<sub>2</sub>O pressure. [District NSR Rule], [Federally Enforceable Through Title V]
10. Manway openings shall be sealed with 20 inch, 150 psi bolted manway flanges with standard fiber gaskets and maintained gas-tight (as defined in Rule 4623). [District NSR Rule], [Federally Enforceable Through Title V]
11. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2], [Federally Enforceable Through Title V]
12. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
13. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
14. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
16. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

17. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
21. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
22. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
23. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
24. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-34-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

3,360,000 GALLON FLOATING ROOF PETROLEUM STORAGE TANK #80,001 WITH METALLIC SHOE PRIMARY SEAL AND SECONDARY WIPER SEAL

## PERMIT UNIT REQUIREMENTS

1. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
2. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
3. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
4. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
5. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
6. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
7. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
8. The maximum gap between the shoe and the tank shell shall be no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
9. There shall be no tears, holes or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
10. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
11. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
12. Pressure-vacuum valves shall be set to within ten (10) percent of the maximum allowable working pressure of the roof. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. All roof openings used for sampling and gauging, except pressure vacuum valves, shall be closed at all times, with no visible gaps and be gas-tight (as defined in Rule 4623), except when the roof opening is in use. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
14. All openings in the tank roof shall be provided with a projection below the liquid surface to prevent belching of liquid and to prevent entrained organic vapor from escaping from the liquid contents of the tank. [District Rule 4623], [Federally Enforceable Through Title V]
15. Any roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least 90% of the area of the opening. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
16. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 4623, 6.1 and 2520, 9.4.2], [Federally Enforceable Through Title V]
17. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
18. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [40 CFR 60.112a(a)(1), District Rule 4623, 5.1.2], [Federally Enforceable Through Title V]

## Initial TV Permit

19. Roof shall be floating on the liquid (i.e., off the roof leg supports) at all times except during initial fill and when tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112a(a)(1)], [Federally Enforceable Through Title V]
20. Primary seal (lower seal) shall be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i)], [Federally Enforceable Through Title V]
21. Secondary seal shall be installed above the primary seal. [40 CFR 60.112a(a)(1)(ii)(A)], [Federally Enforceable Through Title V]
22. If the secondary seal is used in combination with a vapor-mounted primary seal, there shall be no gaps between the tank wall and the secondary seal. [40 CFR 60.112a(a)(1)(ii)(B)], [Federally Enforceable Through Title V]
23. Operator shall be exempt from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)(C)], [Federally Enforceable Through Title V]
24. All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [40 CFR 60.112a(a)(1)(iii), District Rule 4623, 6.1], [Federally Enforceable Through Title V]
25. All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
26. A facility operator, upon detection of a leaking cover, seal, or lid, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
27. An operator shall reinspect a cover, seal, or lid for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
28. Any leak in a cover, seal, or lid shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
29. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
30. Operator shall maintain an inspection log containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
31. Automatic bleeder vents shall be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112a(a)(1)(iii)], [Federally Enforceable Through Title V]
32. Rim vents shall be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. [40 CFR 60.112a(a)(1)(iii)], [Federally Enforceable Through Title V]
33. Operator shall perform gap measurements on primary seals within 60 days of the initial fill and at least once every 5 years thereafter. Operator shall perform gap measurements on secondary seals within 60 days of the initial fill with petroleum liquid and at least once every year thereafter. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill. [40 CFR 60.113a(a)(1)(i)(A), (B), and (C)], [Federally Enforceable Through Title V]
34. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(C)], [Federally Enforceable Through Title V]

## Initial TV Permit

35. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)], [Federally Enforceable Through Title V]
36. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)], [Federally Enforceable Through Title V]
37. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)], [Federally Enforceable Through Title V]
38. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 60 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E)], [Federally Enforceable Through Title V]
39. The primary seal envelope shall be made available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight (8) locations shall be made available. In all other cases, a minimum of four (4) locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 5.1.4], [Federally Enforceable Through Title V]
40. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
41. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
42. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
43. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)], [Federally Enforceable Through Title V]
44. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.115a(c)], [Federally Enforceable Through Title V]
45. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992) and 40 CFR 60, Subpart Ka. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
46. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
47. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-38-5

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

SOLVENT UNIT INCLUDING: NAPHTHA FRACTIONATOR (V-1), LIGHT SOLVENT FRACTIONATOR (V-3), V M & P NAPHTHA FRACTIONATOR (V-5), MINERAL SPIRITS FRACTIONATOR (V-7), 4 REFLUX DRUMS (V-2, V-4, V-6 AND V-8) AND 3,750,000 BTU/HR GAS FIRED FIRE TUBE HEATER (H-1)

## **PERMIT UNIT REQUIREMENTS**

1. Heater shall be fired on purchased natural gas or platformer stabilizer off-gas only. [District NSR Rule], [Federally Enforceable Through Title V]
2. Reflux drums (V-2, V-4, V-6 and V-8) shall vent only to vapor control system on permit S-37-8. [District NSR Rule], [Federally Enforceable Through Title V]
3. There shall be no pressure relief valves or vents designed to emit air contaminants to the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
4. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081], [Federally Enforceable Through Title V]
5. Heater shall be equipped with fuel flowrate indicator. [District NSR Rule], [Federally Enforceable Through Title V]
6. Refinery fuel gas supply line shall be equipped with continuous H<sub>2</sub>S monitor/recorder. [40 CFR 60.105a(4)], [Federally Enforceable Through Title V]
7. Number of fugitive components shall not exceed the following: Valves: 302, Flanges: 94 and Pump Seals: 9. [District NSR Rule], [Federally Enforceable Through Title V]
8. Fuel gas sulfur content (as H<sub>2</sub>S) shall not exceed 0.10 gr/ dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [40 CFR 60, Subpart J, 60.104], [Federally Enforceable Through Title V]
9. Heater shall operate with no emissions in excess of 5% opacity or source testing shall be required to document emission rates. [District NSR Rule], [Federally Enforceable Through Title V]
10. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
11. Pump seals shall operated free of leaks (as defined by Rule 4452), inspected, and labeled. Records shall be kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
12. Heater shall not be fired at greater than 3.75 MMBtu/hr heat input rate. [District NSR Rule], [Federally Enforceable Through Title V]
13. If solvent plant produces odoriferous wastewater, such wastewater shall not be transported in open system or disposed of in open air site(s). [District NSR Rule], [Federally Enforceable Through Title V]
14. If solvent unit products are sold within Kern County, Kern Oil & Refining Company shall supply SJVUAPCD with list of current customers. [District NSR Rule], [Federally Enforceable Through Title V]
15. The permittee shall keep accurate records of refinery fuel gas content, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
16. The permittee shall comply with all applicable notification, recordkeeping and monitoring requirements of Rule 4001. [District Rule 4001], [Federally Enforceable Through Title V]
17. This permit to operate does not authorizes steam production increase over S-37-6 and S-37-11 permit limit. [District NSR Rule], [Federally Enforceable Through Title V]
18. Emission rates shall not exceed any of the following limits: PM<sub>10</sub>: 0.06 lb/hr, SO<sub>x</sub> (as SO<sub>2</sub>): 1.89 lb/hr, NO<sub>x</sub> (as NO<sub>2</sub>): 0.55 lb/hr, VOC: 3.91 lb/hr or CO: 0.14 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
19. Permittee shall comply with all inspection, maintenance and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451 and 4452], [Federally Enforceable Through Title V]

## Initial TV Permit

20. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
21. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO<sub>2</sub> at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
22. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
23. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801], [Federally Enforceable Through Title V]
24. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas, certified diesel fuel with a sulfur content of no more than 0.5% by weight, or refinery gas with a sulfur content of no more than 0.1 grain-H<sub>2</sub>S/dscf (160 ppmv) according to the continuous H<sub>2</sub>S monitor installed downstream of the sulfur recovery unit. [District Rules 4301, 4801 and 2520, 9.3.2], [Federally Enforceable Through Title V]
25. Operator shall report all rolling 3-hour periods during which the average concentration of H<sub>2</sub>S as measured by the H<sub>2</sub>S continuous monitoring system exceeds 0.10 gr/dscf (160 ppmv). [40 CFR Part 60, Subpart J, 60.105(e)(3)(iii)], [Federally Enforceable Through Title V]
26. Operator shall determine compliance with the H<sub>2</sub>S standard using EPA Method 11. [40 CFR Part 60, Subpart J, 60.106(e)], [Federally Enforceable Through Title V]
27. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)], [Federally Enforceable Through Title V]
28. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)], [Federally Enforceable Through Title V]
29. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)], [Federally Enforceable Through Title V]
30. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)], [Federally Enforceable Through Title V]
31. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)], [Federally Enforceable Through Title V]
32. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)], [Federally Enforceable Through Title V]
33. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)], [Federally Enforceable Through Title V]
34. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)], [Federally Enforceable Through Title V]
35. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)], [Federally Enforceable Through Title V]

## Initial TV Permit

36. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)], [Federally Enforceable Through Title V]
37. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)], [Federally Enforceable Through Title V]
38. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)], [Federally Enforceable Through Title V]
39. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)], [Federally Enforceable Through Title V]
40. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)], [Federally Enforceable Through Title V]
41. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)], [Federally Enforceable Through Title V]
42. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)], [Federally Enforceable Through Title V]
43. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)], [Federally Enforceable Through Title V]
44. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)], [Federally Enforceable Through Title V]
45. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)], [Federally Enforceable Through Title V]
46. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)], [Federally Enforceable Through Title V]
47. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)], [Federally Enforceable Through Title V]
48. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)], [Federally Enforceable Through Title V]
49. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)], [Federally Enforceable Through Title V]



## Initial TV Permit

50. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)], [Federally Enforceable Through Title V]
51. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)], [Federally Enforceable Through Title V]
52. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)], [Federally Enforceable Through Title V]
53. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)], [Federally Enforceable Through Title V]
54. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)], [Federally Enforceable Through Title V]
55. Flares used to comply with Subpart GGG shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10(d)], [Federally Enforceable Through Title V]
56. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)], [Federally Enforceable Through Title V]
57. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)], [Federally Enforceable Through Title V]
58. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)], [Federally Enforceable Through Title V]
59. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)], [Federally Enforceable Through Title V]
60. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)], [Federally Enforceable Through Title V]
61. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)], [Federally Enforceable Through Title V]
62. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)], [Federally Enforceable Through Title V]
63. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)], [Federally Enforceable Through Title V]
64. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)], [Federally Enforceable Through Title V]

## Initial TV Permit

65. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)], [Federally Enforceable Through Title V]
66. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)], [Federally Enforceable Through Title V]
67. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)], [Federally Enforceable Through Title V]
68. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H<sub>2</sub>O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)], [Federally Enforceable Through Title V]
69. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)], [Federally Enforceable Through Title V]
70. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)], [Federally Enforceable Through Title V]
71. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)], [Federally Enforceable Through Title V]
72. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)], [Federally Enforceable Through Title V]
73. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
74. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)], [Federally Enforceable Through Title V]

## Initial TV Permit

75. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)], [Federally Enforceable Through Title V]
76. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)], [Federally Enforceable Through Title V]
77. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)], [Federally Enforceable Through Title V]
78. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)], [Federally Enforceable Through Title V]
79. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)], [Federally Enforceable Through Title V]
80. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)], [Federally Enforceable Through Title V]
81. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [District 40 CFR 60.486(k)], [Federally Enforceable Through Title V]
82. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)], [Federally Enforceable Through Title V]
83. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)], [Federally Enforceable Through Title V]
84. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)], [Federally Enforceable Through Title V]
85. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)], [Federally Enforceable Through Title V]

## Initial TV Permit

86. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)], [Federally Enforceable Through Title V]
87. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)], [Federally Enforceable Through Title V]
88. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 °C as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)], [Federally Enforceable Through Title V]
89. Pumps in light liquid service and valves in gas/vapor and light liquid service within a process compounds of usually high molecular weight that consist of many repeated links, each link being a relatively light and simple molecule. [40 CFR 60.593(e)], [Federally Enforceable Through Title V]
90. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)], [Federally Enforceable Through Title V]
91. Unless exempt under 40 CFR 60.593, each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3(b)(1), (2), or (3). [40 CFR 60.482-3(a), (b), and (c)], [Federally Enforceable Through Title V]
92. If a barrier fluid system is used for a compressor, the barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system or both. Each sensor shall be checked daily or shall be equipped with an audible alarm. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier system, or both based on the established criterion, a leak is detected. [40 CFR 60.482-3(d), (e), and (f)], [Federally Enforceable Through Title V]
93. If a barrier fluid system is used for a compressor, detected leaks shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3(g)], [Federally Enforceable Through Title V]
94. Any compressor that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-3(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3(i)(1) and (2). [40 CFR 60.482-3(i)], [Federally Enforceable Through Title V]
95. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3(a), (b), (c), (d), (e), and (h). [40 CFR 60.482-3(j)], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-42-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

150,000 GALLON NAPHTHA STORAGE TANK #3300 WITH VAPOR RECOVERY

## **PERMIT UNIT REQUIREMENTS**

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. Tank and appurtenances shall not be a source of VOC emissions. [District Rule 4623], [Federally Enforceable Through Title V]
3. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of two years, and shall make such records available for District inspection upon request. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
4. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
6. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
7. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

13. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
14. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
15. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
16. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
17. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
18. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
20. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
22. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-43-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

15 HP LIGHT SOLVENT TRUCK LOADING OPERATION WITH VAPOR CONTROL SYSTEM INCLUDING: EMCO WHEATON LOADING HOSE AND VAPOR RETURN COUPLERS, 15 PUMP, METER AND CHECK VALVES AND VAPOR RETURN PIPING TO VAPOR CONTROL SYSTEM

## PERMIT UNIT REQUIREMENTS

---

1. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that TOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid with greatest vapor pressure loaded. [40 CFR 60.502(b), District Rules 2520, 9.4.2 and 4624, 5.1.1 and County Rule 413 (Kern)], [Federally Enforceable Through Title V]
2. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.2 and County Rule 413 (Kern)], [Federally Enforceable Through Title V]
3. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621, 5.1.1], [Federally Enforceable Through Title V]
4. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621, 5.1.2], [Federally Enforceable Through Title V]
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4621, 5.2.2 and 4624, 5.3], [Federally Enforceable Through Title V]
6. No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004], [Federally Enforceable Through Title V]
7. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be EPA Method 27. [District Rule 4621, 6.2.3 and 40CFR 60.503(c)], [Federally Enforceable Through Title V]
8. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5], [Federally Enforceable Through Title V]
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4, Kern County Rule 413], [Federally Enforceable Through Title V]
10. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm during any month that the loading arm(s) are in operation. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
13. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired), and E) inspector name and signature. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
14. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.2, and Kern County Rule 413], [Federally Enforceable Through Title V]
15. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624, 6.2.2, and Kern County Rule 413], [Federally Enforceable Through Title V]
16. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1], [Federally Enforceable Through Title V]
17. Loading operation shall be operated in a leak (as defined in Rule 4624) free manner. [District Rule 4624], [Federally Enforceable Through Title V]
18. Delivery vessels loaded at this facility shall be vapor tight and shall be so certified by the State Fire Marshall. [District Rule 4621], [Federally Enforceable Through Title V]
19. Vapor return hose shall only be connected to refinery vapor control system and shall be utilized during the loading of each truck. [District Rule 4624], [Federally Enforceable Through Title V]
20. Liquid hoses, couplers, flanges, valves, fittings, etc., shall be free of leaks (as defined in Rule 4624). [District Rule 4624], [Federally Enforceable Through Title V]
21. Hose couplers shall be dry break type only. [District NSR Rule], [Federally Enforceable Through Title V]
22. VOC emission rate shall not exceed 4.8 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]



**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-44-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

126,000 GALLON NAPHTHA STORAGE TANK #3019

## **PERMIT UNIT REQUIREMENTS**

1. True vapor pressure of any liquid introduced, placed, or stored in this permit unit shall not exceed 0.86 psia without prior District approval. [District NSR Rule], [Federally Enforceable Through Title V]
2. Average daily tank throughput (on annual basis) shall not exceed 193 bbl/day of fluid without prior District approval. [District NSR Rule], [Federally Enforceable Through Title V]
3. The maximum emission rate of volatile organic compounds shall not exceed 14.3 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
4. Tank shall be equipped with an operational stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
5. All tank seams, welds, flanges and joints shall be maintained in gas-tight (as defined by Rule 4623) condition. [District NSR Rule], [Federally Enforceable Through Title V]
6. There shall be no open, water draw-off drain. [District NSR Rule], [Federally Enforceable Through Title V]
7. Permittee shall maintain accurate records of true vapor pressure, temperature of petroleum liquids in the tank, and daily liquid throughput, such records shall be made readily available for District inspection upon request for a period of five (5) years. [District NSR Rule], [Federally Enforceable Through Title V]
8. If the Reid vapor pressure of the petroleum liquid stored is greater than 1.0 psia, or the maximum true vapor pressure of the petroleum liquid is greater than 1.0 psia, then operator shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [40 CFR 60.115a(a) and 60.115a(d)(1)], [Federally Enforceable Through Title V]
9. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)], [Federally Enforceable Through Title V]
10. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.115a(c)], [Federally Enforceable Through Title V]
11. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
12. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
13. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
14. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
15. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-46-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

30 HP LIQUID LOADING OPERATION INCLUDING ONE UNCONTROLLED LIQUID LOADOUT LINE, ONE ORGANIC LIQUID LOADOUT LINE EQUIPPED WITH VAPOR RECOVERY, TWO 15 HP PUMPS, DRY-BREAK CONNECTORS, METER(S), AND CHECK VALVES.

## PERMIT UNIT REQUIREMENTS

---

1. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that TOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid with greatest vapor pressure loaded. [District Rule 4624, 5.1.1 and NSR Rule, and County Rule 413 (Kern)], [Federally Enforceable Through Title V]
2. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.2 and County Rule 413 (Kern)], [Federally Enforceable Through Title V]
3. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621, 5.1.1], [Federally Enforceable Through Title V]
4. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621, 5.1.2], [Federally Enforceable Through Title V]
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4621, 5.2.2 and 4624, 5.3], [Federally Enforceable Through Title V]
6. No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004], [Federally Enforceable Through Title V]
7. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be EPA Method 27. [District Rule 4621, 6.2.3], [Federally Enforceable Through Title V]
8. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5], [Federally Enforceable Through Title V]
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4, Kern County Rule 413], [Federally Enforceable Through Title V]
10. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm during any month that the loading arm(s) are in operation. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
13. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired), and E) inspector name and signature. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
14. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.2, and Kern County Rule 413], [Federally Enforceable Through Title V]
15. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624, 6.2.2, and Kern County Rule 413], [Federally Enforceable Through Title V]
16. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1], [Federally Enforceable Through Title V]
17. Operation shall include one uncontrolled loadout line for the handling of naphtha and mineral spirits with true vapor pressure's (TVP's) less than 1.5 psia, and one loadout line equipped with vapor recovery for the handling of light reformate and other organic liquids with TVP's greater than 1.5 psia. [District NSR Rule], [Federally Enforceable Through Title V]
18. No trucks with a preceding load of petroleum liquid with a greater true vapor pressure than 0.86 psia at 90 deg. F. shall be loaded from loadout line not attached to vapor recovery system. [District NSR Rule], [Federally Enforceable Through Title V]
19. Only petroleum liquid with a true vapor pressure less than 0.86 psia at 90 deg. F. shall be loaded from loadout hose not attached to vapor recovery system. [District NSR Rule], [Federally Enforceable Through Title V]
20. All liquid handling equipment and components shall be maintained leak-free (as defined in Rule 4624). [District NSR Rule and Rule 4624], [Federally Enforceable Through Title V]
21. Hose couplers shall be dry break type only. [District NSR Rule], [Federally Enforceable Through Title V]
22. VOC emissions from uncontrolled naphtha/mineral spirits loadout line shall not exceed 29.28 lb per day. [District NSR Rule], [Federally Enforceable Through Title V]
23. The loading & vapor collection equipment serving light reformate loading line shall be designed, installed, maintained, and operated such that there are no leaks and no excess organic liquid drainage at disconnections as defined by Rule 4624. [District NSR Rule and Rule 4624], [Federally Enforceable Through Title V]
24. Permittee shall comply with all applicable inspection, maintenance and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451, 4452], [Federally Enforceable Through Title V]
25. Light reformate and other organic liquids with true vapor pressures TVP) greater than 1.5 psi shall be loaded exclusively through loadout line equipped with vapor recovery. [District NSR Rule and Rule 4624], [Federally Enforceable Through Title V]
26. The loadout of organic liquids with true vapor pressures (TVP) greater than 1.5 psi from rack shall not exceed 22,680 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
27. Permittee shall maintain accurate records of liquid type, throughput, temperature, and Reid vapor pressure on site for a period of at least two years and shall be made readily available for District inspection upon request. [District NSR Rule and Rule 1070], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-48-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

225,600 GALLON NAPHTHA STORAGE TANK #5014 WITH VAPOR RECOVERY

## PERMIT UNIT REQUIREMENTS

---

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.1], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-49-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

225,600 GALLON PETROLEUM STORAGE TANK #5015 WITH VAPOR RECOVERY

## PERMIT UNIT REQUIREMENTS

---

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.1], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

12. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
13. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
14. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
15. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
16. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
17. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
20. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
21. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-50-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

42,000 GALLON GASOLINE STORAGE TANK #1100 WITH VAPOR RECOVERY

## **PERMIT UNIT REQUIREMENTS**

1. Throughput shall not exceed 400 bbl/day. [District NSR Rule], [Federally Enforceable Through Title V]
2. Tank average daily temperature shall not exceed 90 degrees F. [District NSR Rule], [Federally Enforceable Through Title V]
3. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, labeled and records kept as required by Rule 4451. [District NSR Rule], [Federally Enforceable Through Title V]
4. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
5. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2 and Rule 4623], [Federally Enforceable Through Title V]
6. VOC emission rate shall not exceed 0.21 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [40 CFR 60.112a], [Federally Enforceable Through Title V]
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
9. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]



## Initial TV Permit

15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
16. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
20. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
22. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
23. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
24. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
25. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-51-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

840,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #20001 WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

---

1. True vapor pressure of stored shall not exceed 1.53 psi. [District NSR Rule], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 50,210 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
4. All tank welds, seams, vents, lines, hatches, ports, gauge hatches, sampling ports, relief valves and appurtenances shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
5. Pressure relief valve to vapor control system shall open at a pressure higher than compressor activation pressure. [District NSR Rule], [Federally Enforceable Through Title V]
6. Tankage VOC vapor shall not be vented to atmosphere. [District NSR Rule and Rule 4623], [Federally Enforceable Through Title V]
7. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rules 1070 and 4623], [Federally Enforceable Through Title V]
8. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
9. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
10. Pump seals shall operated free of leaks (as defined by Rule 4452), inspected, and labeled. Records shall be kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
12. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
13. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
14. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

16. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
17. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
20. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
21. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
22. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
23. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
24. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
27. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
28. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
29. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-52-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

420,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #10000 WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

---

1. True vapor pressure of liquids stored shall not exceed 3.5 psi. [District NSR Rule], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 67,289 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
4. All tank welds, seams, vents, lines, hatches, ports, gauge hatches, sampling ports, relief valves and appurtenances shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
5. Pressure relief valve to vapor control system shall open at a pressure higher than compressor activation pressure. [District NSR Rule], [Federally Enforceable Through Title V]
6. Tankage VOC vapor shall not be vented to atmosphere. [District NSR Rule and Rule 4623], [Federally Enforceable Through Title V]
7. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2 and Rule 4623], [Federally Enforceable Through Title V]
8. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
9. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
10. Pump seals shall operated free of leaks (as defined by Rule 4452), inspected, and labeled. Records shall be kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
11. The permittee shall comply with all applicable notification, recordkeeping and monitoring requirements of Rule 4001. [District Rule 4001], [Federally Enforceable Through Title V]
12. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
13. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
14. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

16. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
17. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
21. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
22. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
23. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
25. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
26. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
28. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
29. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
30. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-53-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

420,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #10002 WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

---

1. True vapor pressure of liquids stored shall not exceed 3.5 psi. [District NSR Rule], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 67,296 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3, 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
4. All tank welds, seams, vents, lines, hatches, ports, gauge hatches, sampling ports, relief valves and appurtenances shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
5. Pressure relief valve to vapor control system shall open at a pressure higher than compressor activation pressure. [District NSR Rule], [Federally Enforceable Through Title V]
6. Tankage VOC vapor shall not be vented to atmosphere. [District NSR Rule and Rule 4623], [Federally Enforceable Through Title V]
7. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily tank throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2 and Rule 4623], [Federally Enforceable Through Title V]
8. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
9. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
10. Pump seals shall operated free of leaks (as defined by Rule 4452), inspected, and labeled. Records shall be kept as required by Rule 4452. [District Rule 4452], [Federally Enforceable Through Title V]
11. The permittee shall comply with all applicable notification, recordkeeping and monitoring requirements of Rule 4001. [District Rule 4001], [Federally Enforceable Through Title V]
12. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
13. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
14. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

16. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
17. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
21. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
22. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
23. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
25. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
26. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
28. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
29. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
30. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-56-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #505 WITH VAPOR RECOVERY

## PERMIT UNIT REQUIREMENTS

---

1. Throughput shall not exceed 200 bbl/day. [District NSR Rule], [Federally Enforceable Through Title V]
2. Tank average daily temperature shall not exceed 90 degrees F. [District NSR Rule], [Federally Enforceable Through Title V]
3. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District NSR Rule], [Federally Enforceable Through Title V]
4. Tank shall be equipped with temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
5. VOC emissions shall not exceed the following: From the tank: 0.09 lb/hr and Fugitive: 0.03 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
6. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
9. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]



## Initial TV Permit

14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-57-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5017 SERVED BY VAPOR RECOVERY AND 29 HP CIRCULATION PUMP WITH CLAY FILTER.

## **PERMIT UNIT REQUIREMENTS**

1. Average daily tank liquid throughput (on annual basis) shall not exceed 500 bbl/day. [District NSR Rule], [Federally Enforceable Through Title V]
2. True vapor pressure of stored material shall not exceed 2.4 psi. [District NSR Rule], [Federally Enforceable Through Title V]
3. Liquids circulating through clay filter shall return to the tank from which it was withdrawn. [District NSR Rule], [Federally Enforceable Through Title V]
4. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District NSR Rule], [Federally Enforceable Through Title V]
5. Filter drainings, back wash, and media shall be handled and disposed of in a manner preventing the emission of VOC to the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
6. Tank pressure relief valve shall open at no lower than 1.73 inches water column pressure and no higher than -0.86 inches water column vacuum. [District NSR Rule], [Federally Enforceable Through Title V]
7. Vapor control system shall operate between 0.1 inches H<sub>2</sub>O vacuum and 0.3 inches H<sub>2</sub>O pressure. [District NSR Rule], [Federally Enforceable Through Title V]
8. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
9. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 1070 and 2520, 9.4.2], [Federally Enforceable Through Title V]
10. Permittee shall comply with all applicable notification and recordkeeping requirements of Rule 4001. [District Rule 4001], [Federally Enforceable Through Title V]
11. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)], [Federally Enforceable Through Title V]
12. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. Storage vessel shall be equipped with a control device designed and operated to reduce inlet VOC emissions by 95% or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) or 40 CFR 60.112b(b)(1) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f). [40 CFR 60.112b(a)(3)(ii), 40 CFR 60.113b(d)], [Federally Enforceable Through Title V]
14. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

15. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
16. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)], [Federally Enforceable Through Title V]
17. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
18. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
20. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
22. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
23. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)], [Federally Enforceable Through Title V]
24. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)], [Federally Enforceable Through Title V]
25. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
26. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)], [Federally Enforceable Through Title V]
27. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
28. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]

## Initial TV Permit

29. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
30. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
31. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
32. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)], [Federally Enforceable Through Title V]
33. If the control device used for this tank is a flare, operator shall record all periods of operation during which the flare pilot flame is absent. [40 CFR 60.115b(d)(2)], [Federally Enforceable Through Title V]
34. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
35. If the control device used for this tank is a flare, operator shall submit semiannual reports to the APCO of all periods recorded in which the pilot flame was absent. [40 CFR 60.115b(d)(3)], [Federally Enforceable Through Title V]
36. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
37. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
38. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
39. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-58-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

29 HP JP-4 TRUCK LOADING OPERATION INCLUDING TWO EMCO WHEATON API STYLE DRYBREAK BOTTOM LOADING COUPLERS AND HOSES, TWO OPW MODEL 633 VAPOR RECOVERY COUPLERS AND VAPOR RETURN HOSES, 29 HP UNLOADING PUMP, FILTER, AND METER AND CHECK VALVES

## PERMIT UNIT REQUIREMENTS

---

1. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that TOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid with greatest vapor pressure loaded. [40 CFR 60.502(b), District Rules 2520, 9.4.2 and 4624, 5.1.1 and County Rule 413 (Kern)], [Federally Enforceable Through Title V]
2. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.2 and County Rule 413 (Kern)], [Federally Enforceable Through Title V]
3. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced. [District Rule 4624, 5.3], [Federally Enforceable Through Title V]
4. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5], [Federally Enforceable Through Title V]
5. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4, Kern County Rule 413], [Federally Enforceable Through Title V]
6. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.1, 9.3.2, 9.4.2], [Federally Enforceable Through Title V]
8. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired), and E) inspector name and signature. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
10. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.2, and Kern County Rule 413], [Federally Enforceable Through Title V]
11. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624, 6.2.2, and Kern County Rule 413], [Federally Enforceable Through Title V]
12. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1], [Federally Enforceable Through Title V]

## Initial TV Permit

13. Vapor return hose shall only be connected to refinery vapor control system and shall be utilized during the loading of each truck. [District NSR Rule], [Federally Enforceable Through Title V]
14. Liquid hoses, couplers, flanges, valves, fittings, etc., shall comply with Rule 4451. [District NSR Rule], [Federally Enforceable Through Title V]
15. Hose couplers shall be drybreak type only. [District NSR Rule], [Federally Enforceable Through Title V]
16. Filter drainings, back wash, and media shall be handled and disposed of in a manner preventing the emission of VOC to the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
17. VOC emission rate shall not exceed 0.63 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-59-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

840,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #20000 WITH VAPOR RECOVERY.

## **PERMIT UNIT REQUIREMENTS**

1. Average daily tank liquid throughput (on annual basis) shall not exceed 110,000 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
2. True vapor pressure of stored material shall not exceed 1.52 psi. [District NSR Rule], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.3 40 CFR 60.112(a)(1)], [Federally Enforceable Through Title V]
4. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District NSR Rule], [Federally Enforceable Through Title V]
5. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
6. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2 and Rule 4623, 6.1], [Federally Enforceable Through Title V]
7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
12. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
16. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
17. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
23. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
24. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]



**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-61-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

800 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK #800

## **PERMIT UNIT REQUIREMENTS**

- 
1. True vapor pressure of any liquid introduced, placed, or stored in this permit unit shall not exceed 0.4 psia without prior District approval. [District NSR Rule], [Federally Enforceable Through Title V]
  2. Average daily tank throughput (on annual basis) shall not exceed 200 bbl/day of fluid without prior District approval. [District NSR Rule], [Federally Enforceable Through Title V]
  3. Tank shall be equipped with an operational stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
  4. Permittee shall satisfy all applicable requirements of District Rule 4001 - New Source Performance Standards, including but not limited to Subpart Kb, Section 116b. [District Rule 4001], [Federally Enforceable Through Title V]
  5. Permittee shall maintain accurate records of true vapor pressure, temperature of petroleum liquids in the tank, types of liquid stored, and daily liquid records, such records shall be made readily available for District inspection upon request for a period of five (5) years. [District NSR Rule], [Federally Enforceable Through Title V]
  6. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
  7. Operator shall maintain records, kept for the life of the source, showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(a)], [Federally Enforceable Through Title V]
  8. The operator shall notify the APCO within 30 days of any occurrence in which the maximum true vapor pressure of the liquid stored exceeds the true vapor pressure limitations specified in this permit. [40 CFR 60.116b(d)], [Federally Enforceable Through Title V]
  9. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
  10. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
  11. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by the EPA. [40 CFR 60.116b(e)], [Federally Enforceable Through Title V]
  12. True vapor pressure of a waste mixture of indeterminate or variable composition shall be determined using ASTM Method D2879, ASTM Method D323, or by an appropriate method approved by the EPA. [40 CFR 60.116b(f)], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-65-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

11,256 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK (DEHY NORTH) WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

---

1. Reid vapor pressure of liquids stored in tank shall not exceed 0.75 psi. [District NSR Rule], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 1,370 bbl/day. [District NSR Rule], [Federally Enforceable Through Title V]
3. Storage temperature of liquids stored shall not exceed 150 degrees F. [District NSR Rule], [Federally Enforceable Through Title V]
4. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 99%. [District NSR Rule], [Federally Enforceable Through Title V]
5. There shall be no VOC emission from manway seals except when sampling or when maintenance is performed. [District NSR Rule], [Federally Enforceable Through Title V]
6. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
7. Tank pressure relief valve shall be set at no less than 1.73 inches H<sub>2</sub>O. [District NSR Rule], [Federally Enforceable Through Title V]
8. Vapor control system shall operate between 0.1 inches H<sub>2</sub>O vacuum and 0.3 inches H<sub>2</sub>O pressure. [District NSR Rule], [Federally Enforceable Through Title V]
9. Manway openings shall be sealed with 20 inch, 150 psi bolted manway flanges with standard fiber gaskets and maintained gas-tight (as defined in Rule 4623). [District NSR Rule], [Federally Enforceable Through Title V]
10. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
12. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
13. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
14. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

16. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
17. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Operator shall keep a record of liquids stored in each container, storage temperature and the Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
20. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
21. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
22. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
23. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
24. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-66-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

11,256 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK (DEHY SOUTH) WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

---

1. Reid vapor pressure of liquids stored in tank shall not exceed 0.75 psi. [District NSR Rule], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 1,370 bbl/day. [District NSR Rule], [Federally Enforceable Through Title V]
3. Storage temperature of liquids stored shall not exceed 150 degrees F. [District NSR Rule], [Federally Enforceable Through Title V]
4. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 99%. [District NSR Rule], [Federally Enforceable Through Title V]
5. There shall be no VOC emission from manway seals except when sampling or when maintenance is performed. [District NSR Rule], [Federally Enforceable Through Title V]
6. Tank shall be equipped with stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
7. Tank pressure relief valve shall be set at no less than 1.73 inches H<sub>2</sub>O. [District NSR Rule], [Federally Enforceable Through Title V]
8. Vapor control system shall operate between 0.1 inches H<sub>2</sub>O vacuum and 0.3 inches H<sub>2</sub>O pressure. [District NSR Rule], [Federally Enforceable Through Title V]
9. Manway openings shall be sealed with 20 inch, 150 psi bolted manway flanges with standard fiber gaskets and maintained gas-tight (as defined in Rule 4623). [District NSR Rule], [Federally Enforceable Through Title V]
10. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
12. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
13. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
14. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

16. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
17. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Operator shall keep a record of liquids stored in each container, storage temperature and the Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
20. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
21. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
22. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
23. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
24. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-67-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

8,400 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #200 WITH VAREC P/R VALVE, 1 HP PUMP, AND TRUCK UNLOADING FILL LINE WITH DRY-BREAK COUPLER.

## PERMIT UNIT REQUIREMENTS

---

1. Average daily tank liquid throughput (on annual basis) shall not exceed 2,500 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
2. Truck unloading shall be performed in a manner preventing spillage of petroleum liquid. [District NSR Rule], [Federally Enforceable Through Title V]
3. Vapor balance hose shall be connected during truck unloading. [District NSR Rule], [Federally Enforceable Through Title V]
4. True vapor pressure of stored material shall not exceed 2.7 psi. [District NSR Rule], [Federally Enforceable Through Title V]
5. The permittee shall keep accurate records of Reid vapor pressure, storage temperature and types of liquids stored, for a period of two years, and shall make such records available for District inspection upon request. [District Rule 1070], [Federally Enforceable Through Title V]
6. CARB certified vapor recovery efficiency of at least 95% shall be obtained during the filling of the gasoline storage tank. [District Rules 4621], [Federally Enforceable Through Title V]
7. The vapor recovery systems and their components shall be installed, operated, and maintained in accordance with the State certification requirements. [District Rules 4621], [Federally Enforceable Through Title V]
8. Aboveground storage tank(s) shall be equipped with pressure/vacuum valves set to within 10 percent of the maximum working pressure of the tank. [District Rule 4621], [Federally Enforceable Through Title V]
9. All vapor lines, connections, fittings, lines, and caps shall be vapor tight per Rule 4621. [District Rule 4621], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-71-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

25 HP ETHANOL TRUCK RECEIVING AND LOADING OPERATION INCLUDING TRUCK UNLOADING CONNECTION, TRUCK LOADING HOSE WITH DRY BREAK COUPLER, VAPOR RECOVERY HOSE WITH DRY BREAK CONNECTOR AND PIPING TO PERMIT S-37-56

## **PERMIT UNIT REQUIREMENTS**

---

1. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621, 5.1.1], [Federally Enforceable Through Title V]
2. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621, 5.1.2], [Federally Enforceable Through Title V]
3. Any delivery vessel into which gasoline vapors have been transferred shall be filled only at a loading facility that is equipped with a certified system that prevents at least 95% by weight of the gasoline vapors displaced from entering the atmosphere. The loading facility vapor recovery system shall not create a back pressure in excess of 18 inches water column. [District Rules 4621, 5.2.2, 5.2.5], [Federally Enforceable Through Title V]
4. No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004], [Federally Enforceable Through Title V]
5. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be EPA Method 27. [District Rule 4621, 6.2.3], [Federally Enforceable Through Title V]
6. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1], [Federally Enforceable Through Title V]
7. Only ethanol shall be received or loaded. [District NSR Rule], [Federally Enforceable Through Title V]
8. Equipment shall be operated to prevent spillage. [District NSR Rule], [Federally Enforceable Through Title V]
9. Trucks shall be pumped dry before hose disconnect. [District NSR Rule], [Federally Enforceable Through Title V]
10. Vapor return hose shall be connected to refinery vapor recovery system whenever ethanol is loaded. [District NSR Rule], [Federally Enforceable Through Title V]
11. Ethanol loaded shall not exceed 3,000 gallons in any one day. [District NSR Rule], [Federally Enforceable Through Title V]
12. Valves and flanges shall be operated free of leaks (as defined by Rule 4451), inspected, and labeled. Records shall be kept as required by Rule 4451. [District Rule 4451], [Federally Enforceable Through Title V]
13. Ethanol shall be unloaded to tank S-37-56. [District NSR Rule], [Federally Enforceable Through Title V]
14. All open ended lines shall be capped or equipped with two closed valves when not in use. [District NSR Rule], [Federally Enforceable Through Title V]
15. VOC emission rate shall not exceed 0.08 lb/1,000 gallons loaded. [District Rule 4624], [Federally Enforceable Through Title V]
16. VOC emission rate shall not exceed 0.61 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-77-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

23.4 MMBTU/HR DIESEL HYDROTREATER UNIT

**PERMIT UNIT REQUIREMENTS**

1. Permittee shall comply with all inspection, maintenance and recordkeeping requirements of Rule 4451 and 4452. [District Rules 4451 & 4452], [Federally Enforceable Through Title V]
2. Leaks from valves and connectors subject to the provisions of Rule 4451 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured one (1) cm from potential source. [District NSR Rule], [Federally Enforceable Through Title V]
3. Leaks from pump and compressor seals subject to the provisions of Rule 4452 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured one (1) cm from potential source. [District NSR Rule], [Federally Enforceable Through Title V]
4. This unit shall be fired on PUC or FERC regulated natural gas only. [District NSR Rule], [Federally Enforceable Through Title V]
5. Total heat input into the reactor feed heater (H-1) shall not exceed 12.03 MMBtu/hr. [District NSR Rule], [Federally Enforceable Through Title V]
6. Total heat input into the stripper reboiler heater (H-2) shall not exceed 11.40 MMBtu/hr. [District NSR Rule], [Federally Enforceable Through Title V]
7. Emission rates shall not exceed any of the following: PM10: 0.0137 lb/MMBtu; NOx (as NO2): 0.036 lb/MMBtu; VOC: 0.0058 lb/MMBtu; or CO: 150 ppmv @ 3% O2. [District NSR Rule and District Rules 4305 and 4351], [Federally Enforceable Through Title V]
8. Fuel gas sulfur content shall not exceed 0.75 grain/100 scf. [District NSR Rule], [Federally Enforceable Through Title V]
9. Permittee shall maintain records of hhv of fuel burned and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4351], [Federally Enforceable Through Title V]
10. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
11. Permittee shall maintain accurate records of fuel gas BTU content, and daily records of volume and sulfur content of gas burned in hydrotreater heaters. [District Rule 1070], [Federally Enforceable Through Title V]
12. Records required by this permit shall be retained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 1070 & 4305], [Federally Enforceable Through Title V]
13. Permittee shall meet all applicable requirements of NSPS Subparts A and J. [District Rule 4001], [Federally Enforceable Through Title V]
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
15. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)], [Federally Enforceable Through Title V]
16. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO2 at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
17. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
18. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801], [Federally Enforceable Through Title V]
19. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas. [District Rules 4301, 4801 and 2520, 9.3.2], [Federally Enforceable Through Title V]



## Initial TV Permit

20. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]
21. Leak detection shall be performed with a portable hydrocarbon detection instrument in accordance with EPA Method 21. [District Rule 4451, 6.3.4], [Federally Enforceable Through Title V]
22. Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system. Each closed-purge, closed-loop, or closed-vent system shall return the purged process fluid directly to the process line; or collect and recycle the purged process fluid to a process; or be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR 60.482-10. [40 CFR 60.482-5], [Federally Enforceable Through Title V]
23. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(a)(b)], [Federally Enforceable Through Title V]
24. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]
25. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hvh). [District Rule 2520, 9.3.2, 4305, 5.0, 8.2 and 4351, 8.1], [Federally Enforceable Through Title V]
26. Stack concentrations of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. In-stack O2 monitors are acceptable for O2 measurement. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
27. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the allowable emissions rate, the permittee shall notify the District and return the NOx and CO concentrations to the allowable emissions rate as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the allowable emissions rate after one hour, the permittee shall conduct an emissions test within 60 days, utilizing District approved test methods, to determine compliance with the applicable emissions limits. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
28. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
29. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records must also include a description of any corrective action taken to maintain the emissions within an acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made available for District inspection upon request. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
30. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081], [Federally Enforceable Through Title V]
31. Exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081], [Federally Enforceable Through Title V]
32. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
33. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
34. If permittee fails any compliance demonstration for NOx or CO emission limits, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
35. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
36. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
37. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]

## Initial TV Permit

38. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081 and 4351], [Federally Enforceable Through Title V]
39. During the source test, emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
40. Annual test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2 and 4351, 6.3], [Federally Enforceable Through Title V]
41. The following conditions must be met for representative unit(s) to be used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
42. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
43. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]
44. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-78-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

SULFUR SCRUBBING SYSTEM INCLUDING MEA/DEA CONTACTOR VESSEL (ABSORBER), GAS LIQUID SEPARATOR, AMINE REGENERATION VESSEL, LIQUID SOLID SEPARATOR, SULFUR FILTER, AND ASSOCIATED AIR BLOWERS, PUMPS AND PIPING.

## **PERMIT UNIT REQUIREMENTS**

- 
1. Volatile organic compounds (VOC) emissions from pump ("device" as defined in Rule 4452) seals for the sulfur recovery unit shall not exceed 500 ppmv measured 1 cm or less from the source of the emission. [District NSR Rule], [Federally Enforceable Through Title V]
  2. VOC emissions from valves, pressure relief valves, flanges and threaded connections (as defined in Rule 4451) for the sulfur recovery unit shall not exceed 100 ppmv measured 1 cm or less from the source of the emission. [District NSR Rule], [Federally Enforceable Through Title V]
  3. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
  4. Sulfur compound emissions calculated as sulfur dioxide (SO<sub>2</sub>) associated with the sulfur recovery unit shall not exceed 0.2% by volume averaged over 15 consecutive minutes. [District Rule 4801], [Federally Enforceable Through Title V]
  5. Testing for compliance with compressor, pump seal, valve, pressure relief valve, flange and threaded connection emission rates shall be conducted using EPA Test Method 21, 40 CFR, Part 60. [District Rule 2201], [Federally Enforceable Through Title V]
  6. An instrument for continuous monitoring and recording the concentration (on a dry basis) of H<sub>2</sub>S in fuel gas before being burned shall be installed, calibrated, maintained, and operated. [40 CFR 60.105(a)(4)], [Federally Enforceable Through Title V]
  7. The relative accuracy of the continuous H<sub>2</sub>S monitoring system must be no greater than 20 percent when the average reference method (RM) value is used to calculate RA or ten (10) percent when the applicable emission standard is used. [40 CFR 60.105(a)(4)(iii)], [Federally Enforceable Through Title V]
  8. Testing to determine H<sub>2</sub>S concentration in fuel gas shall be conducted using EPA Test Method 11, 15, 15A, or 16, 40 CFR 60, App. A. [40 CFR 60.105(a)(4)(iii)], [Federally Enforceable Through Title V]
  9. The calibration drift of the H<sub>2</sub>S monitoring system must not drift or deviate from the reference value of the calibration gas or reference source by more than five (5) percent of the established span value for six out of seven test days. [40 CFR 60.105(a)(4)(iii)], [Federally Enforceable Through Title V]
  10. The span value of the continuous H<sub>2</sub>S monitor is 425 mg/dscm [40 CFR 60.105(a)(4)(i)], [Federally Enforceable Through Title V]
  11. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rules 1080 and 2520, 9.3.2], [Federally Enforceable Through Title V]
  12. Continuous emission monitoring records of H<sub>2</sub>S concentration in refinery process fuel gas shall be maintained for a period of at least five years and made readily available for District inspection upon request. [District NSR Rule, District Rule 2520, 9.3.2 and 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-79-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

14,700 GALLON ABOVE GROUND GASOLINE STORAGE TANK EQUIPPED WITH ONE (1) DISPENSING NOZZLE AND CARB CERTIFIED VAPOR BALANCE SYSTEM CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT #S-37-8.

## PERMIT UNIT REQUIREMENTS

---

1. CARB certified vapor recovery efficiency of at least 95% shall be obtained during the filling of the gasoline storage tank and vehicle fuel tanks. [District Rules 4621 and 4622], [Federally Enforceable Through Title V]
2. The vapor recovery systems and their components shall be installed, operated, and maintained in accordance with the State certification requirements. [District Rules 4621 and 4622], [Federally Enforceable Through Title V]
3. Aboveground storage tank(s) shall be equipped with pressure/vacuum valves set to within 10 percent of the maximum working pressure of the tank. [District Rule 4621], [Federally Enforceable Through Title V]
4. All vapor lines, connections, fittings, lines, and caps shall be vapor tight per Rule 4621. [District Rule 4621], [Federally Enforceable Through Title V]
5. The permittee shall perform and pass a Dynamic Back Pressure Test using BAAQMD Method ST-27 at least once every five years. [District Rule 4622], [Federally Enforceable Through Title V]
6. The permittee shall perform and pass a Static Pressure Decay Test using BAAQMD Method ST-38 at least once every 12 months. [District Rule 4622], [Federally Enforceable Through Title V]
7. The District shall be notified by the permittee 15 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. [District Rule 1081], [Federally Enforceable Through Title V]
8. Records of monthly gasoline throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 4622], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley  
Air Pollution Control District**

**PERMIT UNIT:** S-37-80-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

471 HP DETROIT MODEL 12V71T DIESEL FIRED IC ENGINE DRIVING AN EMERGENCY GENERATOR

**PERMIT UNIT REQUIREMENTS**

- 
1. Particulate matter emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201], [Federally Enforceable Through Title V]
  2. The engine shall be equipped with a non-resettable elapsed-time meter indicating total hours of operation. [District NSR Rule], [Federally Enforceable Through Title V]
  3. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. [District NSR Rule], [Federally Enforceable Through Title V]
  4. This engine shall be operated only for required regulatory purposes and during utility power interruptions. [District NSR Rule], [Federally Enforceable Through Title V]
  5. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), and the sulfur content of the diesel fuel used. [District Rules 1070, 2520, 9.4.2 and 4701], [Federally Enforceable Through Title V]
  6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. Compliance with this requirement is assured by only using diesel fuel with sulfur content not exceeding 0.05% by weight. [District Rule 4801 and Kern County Rule 407], [Federally Enforceable Through Title V]
  7. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
  8. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880-71. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
  9. The permittee shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-81-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

225 HP CUMMINS MODEL NT855F1 DIESEL FIRED IC ENGINE DRIVING EMERGENCY FIREWATER PUMP

## PERMIT UNIT REQUIREMENTS

- 
1. Particulate matter emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201], [Federally Enforceable Through Title V]
  2. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. [District NSR Rule], [Federally Enforceable Through Title V]
  3. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), and the sulfur content of the diesel fuel used. [District Rules 1070, 2520, 9.4.2 and 4701], [Federally Enforceable Through Title V]
  4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. Compliance with this requirement is assured by only using diesel fuel with sulfur content not exceeding 0.05% by weight. [District Rule 4801 and Kern County Rule 407], [Federally Enforceable Through Title V]
  5. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
  6. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880-71. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
  7. The permittee shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-82-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

60 HP WAUKESHA MODEL 135 GZU-15861-G GAS-FIRED IC ENGINE POWERING EMERGENCY INSTRUMENT AIR COMPRESSOR

**PERMIT UNIT REQUIREMENTS**

1. Particulate matter emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201], [Federally Enforceable Through Title V]
2. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. [District NSR Rule], [Federally Enforceable Through Title V]
3. This engine shall be operated only for required regulatory purposes and during utility power interruptions. [District NSR Rule], [Federally Enforceable Through Title V]
4. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407], [Federally Enforceable Through Title V]
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407], [Federally Enforceable Through Title V]
6. If the engine is fired on supplier certified natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. If the engine is not fired on supplier certified natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. If the engine is not fired on supplier certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), and the sulfur content of the natural gas fuel used. [District Rules 1070, 2520, 9.4.2 and 4701], [Federally Enforceable Through Title V]
10. The permittee shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-83-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

150 HP WAUKESHA MODEL 6 WAKB-10F GAS-FIRED IC ENGINE POWERING AN EMERGENCY UTILITY AIR COMPRESSOR

**PERMIT UNIT REQUIREMENTS**

1. Particulate matter emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201], [Federally Enforceable Through Title V]
2. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. [District NSR Rule], [Federally Enforceable Through Title V]
3. This engine shall be operated only for required regulatory purposes and during utility power interruptions. [District NSR Rule], [Federally Enforceable Through Title V]
4. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407], [Federally Enforceable Through Title V]
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407], [Federally Enforceable Through Title V]
6. If the engine is fired on supplier certified natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. If the engine is not fired on supplier certified natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. If the engine is not fired on supplier certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), and the sulfur content of the natural gas fuel used. [District Rules 1070, 2520, 9.4.2 and 4701], [Federally Enforceable Through Title V]
10. The permittee shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]



**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-84-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

165 HP STATIONARY NATURAL GAS-FIRED INGERSOLL RAND, MODEL 6JVG (SERIAL #6AAJ226), I.C. ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE NORTH HYDROGEN COMPRESSOR AT THE PLATFORMER UNIT (#S-37-4).

## **PERMIT UNIT REQUIREMENTS**

1. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule], [Federally Enforceable Through Title V]
2. NOx emission concentrations shall not exceed 50 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 90%. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
3. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
4. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
5. Permittee shall comply with all inspection, maintenance, and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451 and 4452], [Federally Enforceable Through Title V]
6. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
7. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
8. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
9. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
10. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701], [Federally Enforceable Through Title V]
11. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for twelve months if two consecutive deviations are observed during quarterly monitoring. [District Rule 2520, 9.3.2 & 9.4.2 & District Rule 4701], [Federally Enforceable Through Title V]
12. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall immediately notify the District, and conduct a certified source test within 60 days of the first exceedance. [District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 1070 & District Rule 4701], [Federally Enforceable Through Title V]
14. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4701], [Federally Enforceable Through Title V]

## Initial TV Permit

15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407], [Federally Enforceable Through Title V]
16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 & Kern County Rule 404], [Federally Enforceable Through Title V]
17. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801], [Federally Enforceable Through Title V]
18. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
19. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
21. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. An engine operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
23. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
25. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-85-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

165 HP INGERSOLL-RAND MODEL 6JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE #2 HYDROGEN COMPRESSOR - MIDDLE, AT THE PLATFORMER UNIT (#S-37-4).

## PERMIT UNIT REQUIREMENTS

1. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule], [Federally Enforceable Through Title V]
2. NOx emission concentrations shall not exceed 50 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 90%. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
3. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
4. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
5. Permittee shall comply with all inspection, maintenance, and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451 and 4452], [Federally Enforceable Through Title V]
6. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
7. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
8. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
9. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
10. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701], [Federally Enforceable Through Title V]
11. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for twelve months if two consecutive deviations are observed during quarterly monitoring. [District Rule 2520, 9.3.2 & 9.4.2 & District Rule 4701], [Federally Enforceable Through Title V]
12. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall immediately notify the District, and conduct a certified source test within 60 days of the first exceedance. [District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 1070 & District Rule 4701], [Federally Enforceable Through Title V]
14. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4701], [Federally Enforceable Through Title V]

## Initial TV Permit

15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407], [Federally Enforceable Through Title V]
16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 & Kern County Rule 404], [Federally Enforceable Through Title V]
17. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801], [Federally Enforceable Through Title V]
18. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
19. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
21. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. An engine operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
23. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
25. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-86-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

165 HP INGERSOLL-RAND MODEL 6JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE #1 HYDROGEN COMPRESSOR - SOUTH, AT THE PLATFORMER UNIT (#S-37-4).

**PERMIT UNIT REQUIREMENTS**

1. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule], [Federally Enforceable Through Title V]
2. NOx emission concentrations shall not exceed 50 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 90%. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
3. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
4. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
5. Permittee shall comply with all inspection, maintenance, and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451 and 4452], [Federally Enforceable Through Title V]
6. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
7. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
8. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
9. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
10. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701], [Federally Enforceable Through Title V]
11. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for twelve months if two consecutive deviations are observed during quarterly monitoring. [District Rule 2520, 9.3.2 & 9.4.2 & District Rule 4701], [Federally Enforceable Through Title V]
12. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall immediately notify the District, and conduct a certified source test within 60 days of the first exceedance. [District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 1070 & District Rule 4701], [Federally Enforceable Through Title V]
14. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4701], [Federally Enforceable Through Title V]

## Initial TV Permit

15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407], [Federally Enforceable Through Title V]
16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 & Kern County Rule 404], [Federally Enforceable Through Title V]
17. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801], [Federally Enforceable Through Title V]
18. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
19. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
21. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. An engine operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
23. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
25. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-87-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

120 HP INGERSOLL-RAND MODEL 4JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE EAST HYDROGEN COMPRESSOR AT THE UNIFIER UNIT (#S-37-3).

## PERMIT UNIT REQUIREMENTS

1. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule], [Federally Enforceable Through Title V]
2. NOx emission concentrations shall not exceed 50 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 90%. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
3. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
4. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
5. Permittee shall comply with all inspection, maintenance, and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451 and 4452], [Federally Enforceable Through Title V]
6. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
7. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
8. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
9. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
10. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701], [Federally Enforceable Through Title V]
11. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for twelve months if two consecutive deviations are observed during quarterly monitoring. [District Rule 2520, 9.3.2 & 9.4.2 & District Rule 4701], [Federally Enforceable Through Title V]
12. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall immediately notify the District, and conduct a certified source test within 60 days of the first exceedance. [District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 1070 & District Rule 4701], [Federally Enforceable Through Title V]
14. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4701], [Federally Enforceable Through Title V]

## Initial TV Permit

15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407], [Federally Enforceable Through Title V]
16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 & Kern County Rule 404], [Federally Enforceable Through Title V]
17. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801], [Federally Enforceable Through Title V]
18. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
19. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
21. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. An engine operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
23. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
25. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]



## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-88-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

120 HP INGERSOLL-RAND MODEL 4JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE WEST HYDROGEN COMPRESSOR AT THE UNIFINER UNIT (#S-37-3).

## PERMIT UNIT REQUIREMENTS

1. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule], [Federally Enforceable Through Title V]
2. NOx emission concentrations shall not exceed 50 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 90%. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
3. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
4. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
5. Permittee shall comply with all inspection, maintenance, and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451 and 4452], [Federally Enforceable Through Title V]
6. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
7. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 1081, District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
8. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
9. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
10. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701], [Federally Enforceable Through Title V]
11. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for twelve months if two consecutive deviations are observed during quarterly monitoring. [District Rule 2520, 9.3.2 & 9.4.2 & District Rule 4701], [Federally Enforceable Through Title V]
12. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall immediately notify the District, and conduct a certified source test within 60 days of the first exceedance. [District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 1070 & District Rule 4701], [Federally Enforceable Through Title V]
14. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4701], [Federally Enforceable Through Title V]

## Initial TV Permit

15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407], [Federally Enforceable Through Title V]
16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 & Kern County Rule 404], [Federally Enforceable Through Title V]
17. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801], [Federally Enforceable Through Title V]
18. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
19. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
21. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
22. An engine operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
23. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
25. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-90-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

105,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #2501 WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

---

1. Tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 99%. [District NSR Rule], [Federally Enforceable Through Title V]
2. Operation shall include vapor piping shared between tanks #S-37-90 and '-91, and connected to refinery vapor recovery system. [District NSR Rule], [Federally Enforceable Through Title V]
3. All collected vapors shall be compressed only to refinery vapor recovery system. [District NSR Rule], [Federally Enforceable Through Title V]
4. True vapor pressure (TVP) of liquids stored in tank shall not exceed 9.9 psi. [District NSR Rule], [Federally Enforceable Through Title V]
5. Average daily tank liquid throughput (on annual basis) shall not exceed 4,200 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
6. Maximum fugitive VOC emissions from components in liquid service serving permit unit shall not exceed 0.05 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
7. Permittee shall comply with all inspection, maintenance and recordkeeping requirements of Rules 4451, 4452, and 4623. [District Rules 4451, 4452, and 4623], [Federally Enforceable Through Title V]
8. Compliance with leak rate requirements for fugitive emission source components shall be verified using EPA Test Method 21, 40 CFR, Part 60. [District Rules 4451, 4452, and 4623], [Federally Enforceable Through Title V]
9. Permittee shall maintain accurate records of fugitive component counts & resulting emissions calculated using emission factors from: Table D-3 of CARB Technical Guidance Document to the Criteria & Guidance Regulation for AB-2588, August 1989. [District Rule 1070 and District NSR Rule], [Federally Enforceable Through Title V]
10. This tank shall have no provisions for the heating of stored substances. [District NSR Rule], [Federally Enforceable Through Title V]
11. The tank shall be equipped with a fixed-roof with no holes or openings. [District NSR Rule], [Federally Enforceable Through Title V]
12. Tank roof appurtenances shall be maintained gas-tight as defined by Rule 4623 (less than 10,000 ppmv). [District Rule 4623], [Federally Enforceable Through Title V]
13. Tank P/V valve shall be set to within 10% of the maximum allowable working pressure of the tank. [District NSR Rule], [Federally Enforceable Through Title V]
14. The operator shall keep accurate records of Reid vapor pressure (RVP), storage temperature, types of liquid stored, and daily liquid throughput of tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
15. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
16. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)], [Federally Enforceable Through Title V]
17. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) or 40 CFR 60.112b(b)(1) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f). [40 CFR 60.112b(a)(3)(ii), 40 CFR 60.113b(d)], [Federally Enforceable Through Title V]

## Initial TV Permit

19. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
20. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
21. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)], [Federally Enforceable Through Title V]
22. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
23. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
25. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
28. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)], [Federally Enforceable Through Title V]
29. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)], [Federally Enforceable Through Title V]
30. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
31. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)], [Federally Enforceable Through Title V]
32. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]

## Initial TV Permit

33. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
34. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
35. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
36. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
37. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)], [Federally Enforceable Through Title V]
38. If the control device used for this tank is a flare, operator shall record all periods of operation during which the flare pilot flame is absent. [40 CFR 60.115b(d)(2)], [Federally Enforceable Through Title V]
39. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
40. If the control device used for this tank is a flare, operator shall submit semiannual reports to the APCO of all periods recorded in which the pilot flame was absent. [40 CFR 60.115b(d)(3)], [Federally Enforceable Through Title V]
41. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
43. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
44. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-91-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

105,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #2502 WITH VAPOR RECOVERY.

## PERMIT UNIT REQUIREMENTS

1. Tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 99%. [District NSR Rule], [Federally Enforceable Through Title V]
2. Operation shall include vapor piping shared between tanks #S-37-90 and '-91, and connected to refinery vapor recovery system. [District NSR Rule], [Federally Enforceable Through Title V]
3. All collected vapors shall be compressed only to refinery vapor recovery system. [District NSR Rule], [Federally Enforceable Through Title V]
4. True vapor pressure (TVP) of liquids stored in tank shall not exceed 12.82 psi. [District NSR Rule], [Federally Enforceable Through Title V]
5. Average daily tank liquid throughput (on annual basis) shall not exceed 22,680 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
6. Maximum fugitive VOC emissions from components in liquid service serving permit unit shall not exceed 0.05 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
7. Permittee shall comply with all inspection, maintenance and recordkeeping requirements of Rules 4451, 4452, and 4623. [District Rules 4451, 4452, and 4623], [Federally Enforceable Through Title V]
8. Compliance with leak rate requirements for fugitive emission source components shall be verified using EPA Test Method 21, 40 CFR, Part 60. [District Rules 4451, 4452, and 4623], [Federally Enforceable Through Title V]
9. Permittee shall maintain accurate records of fugitive component counts & resulting emissions calculated using emission factors from: Table D-3 of CARB Technical Guidance Document to the Criteria & Guidance Regulation for AB-2588, August 1989. [District Rule 1070 and District NSR Rule], [Federally Enforceable Through Title V]
10. This tank shall have no provisions for the heating of stored substances. [District NSR Rule], [Federally Enforceable Through Title V]
11. The tank shall be equipped with a fixed-roof with no holes or openings. [District NSR Rule], [Federally Enforceable Through Title V]
12. Tank roof appurtenances shall be maintained gas-tight as defined by Rule 4623 (less than 10,000 ppmv). [District Rule 4623], [Federally Enforceable Through Title V]
13. Tank P/V valve shall be set to within 10% of the maximum allowable working pressure of the tank. [District NSR Rule], [Federally Enforceable Through Title V]
14. The operator shall keep accurate records Reid vapor pressure (RVP), storage temperature, types of liquids stored, and daily liquid throughput of tank. [District Rule 1070 and Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
15. Records required by this permit shall be retained on site for a period of at least two years and shall be made readily available for District inspection upon request. [District Rule 1070, and Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
16. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)], [Federally Enforceable Through Title V]
17. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) or 40 CFR 60.112b(b)(1) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f). [40 CFR 60.112b(a)(3)(ii), 40 CFR 60.113b(d)], [Federally Enforceable Through Title V]

## Initial TV Permit

19. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
20. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
21. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)], [Federally Enforceable Through Title V]
22. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
23. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
25. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
28. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)], [Federally Enforceable Through Title V]
29. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)], [Federally Enforceable Through Title V]
30. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
31. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)], [Federally Enforceable Through Title V]
32. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]

## Initial TV Permit

33. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
34. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
35. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
36. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
37. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)], [Federally Enforceable Through Title V]
38. If the control device used for this tank is a flare, operator shall record all periods of operation during which the flare pilot flame is absent. [40 CFR 60.115b(d)(2)], [Federally Enforceable Through Title V]
39. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
40. If the control device used for this tank is a flare, operator shall submit semiannual reports to the APCO of all periods recorded in which the pilot flame was absent. [40 CFR 60.115b(d)(3)], [Federally Enforceable Through Title V]
41. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
43. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
44. This unit does not store organic materials which are liquid at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]



## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-92-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

180 HP INGERSOLL-RAND, MODEL JVG-6, NATURAL GAS-FIRED I.C. ENGINE (SERIAL # 6AJ450) WITH NON-SELECTIVE CATALYTIC REDUCTION (NSCR) TO SERVE HYDROGEN BOOSTER COMPRESSOR AT THE PLATFORMER UNIT (S-37-4)

## PERMIT UNIT REQUIREMENTS

1. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule], [Federally Enforceable Through Title V]
2. Gas fired emission rates shall not exceed : PM-10: 0.0112 lb/MM Btu; and SOx (as SO<sub>2</sub>): 0.0006 lb/MMBtu. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
3. Volume of fuel gas combusted shall not exceed 41,420 Scf/day. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
4. NO<sub>x</sub> emission concentrations shall not exceed 50 ppm by volume at 15% O<sub>2</sub> or exhaust emission concentrations shall be reduced by 90%. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
5. VOC emissions concentrations shall not exceed 250 ppmv at 15% O<sub>2</sub>. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
6. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O<sub>2</sub>. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
7. Permittee shall comply with all inspection, maintenance, and recordkeeping requirements of Rules 4451 and 4452. [District Rules 4451 and 4452], [Federally Enforceable Through Title V]
8. Compliance with NO<sub>x</sub>, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 1081, District Rule 2520, 9.3.2, & District Rule 4701], [Federally Enforceable Through Title V]
9. Compliance with NO<sub>x</sub>, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 1081, District Rule 2520, 9.3.2, and District Rule 4701], [Federally Enforceable Through Title V]
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
12. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701], [Federally Enforceable Through Title V]
13. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, and O<sub>2</sub> at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for twelve months if two consecutive deviations are observed during quarterly monitoring. [District Rule 2520 9.3.2, 9.4.2, and District Rule 4701], [Federally Enforceable Through Title V]
14. If the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall immediately notify the District, and conduct a certified source test within 60 days of the first exceedance. [District Rule 4701], [Federally Enforceable Through Title V]

## Initial TV Permit

15. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4701], [Federally Enforceable Through Title V]
16. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4701], [Federally Enforceable Through Title V]
17. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407], [Federally Enforceable Through Title V]
18. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 & Kern County Rule 404], [Federally Enforceable Through Title V]
19. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801], [Federally Enforceable Through Title V]
20. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
21. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
22. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
23. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
24. An engine operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
25. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

### San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-93-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

TRUCK LOADING RACK, INCLUDING 4 FUEL OIL LOADING SPOTS AND 2 ATMOSPHERIC GAS OIL (AGO) LOADING SPOTS

## PERMIT UNIT REQUIREMENTS

- 
1. There shall be no truck loading of organic liquids with TVP at actual loading temperature of 1.5 psia or greater. [District Rule 4624], [Federally Enforceable Through Title V]
  2. The permittee shall keep accurate records of TVP, loading temperature and types of liquids loaded, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520. 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-94-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

RAILCAR LOADING RACK, INCLUDING 6 DIESEL FUEL LOADING SPOTS

## PERMIT UNIT REQUIREMENTS

- 
1. There shall be no truck loading of organic liquids with TVP at actual loading temperature of 1.5 psia or greater. [District Rule 4624], [Federally Enforceable Through Title V]
  2. The permittee shall keep accurate records of TVP, loading temperature and types of liquids loaded, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520. 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-95-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

420,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #10003 VENTING TO 2000 LB CARBON CANNISTER SHARED WITH S-37-96

## PERMIT UNIT REQUIREMENTS

1. Tank liquid throughput shall not exceed 2,454 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
2. True vapor pressure (TVP) of liquids stored shall not exceed 2.96 psi at storage temperature. [District NSR Rule], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623], [Federally Enforceable Through Title V]
4. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
5. Permittee shall use District approved VOC detection device, calibrated with methane in accordance with EPA Method 21, to monitor VOC emission concentration. [District Rule 4623], [Federally Enforceable Through Title V]
6. Carbon canister shall be replaced when vapor concentration exceeds 150% of the initial vapor concentration. If the initial vapor concentration is less than 7 ppmv the canister shall be replaced when the concentration is greater than 10 ppmv. [District NSR Rule], [Federally Enforceable Through Title V]
7. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, VOC emission concentration, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 1070 & 2520, 9.4.2], [Federally Enforceable Through Title V]
8. The permittee shall comply with all applicable notification, recordkeeping and monitoring requirements of Rule 4001. [District Rule 4001], [Federally Enforceable Through Title V]
9. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)], [Federally Enforceable Through Title V]
10. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
12. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)], [Federally Enforceable Through Title V]

## Initial TV Permit

14. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
15. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
16. Any component leak shall be repaired to a leak-free condition or vented to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
17. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
20. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)], [Federally Enforceable Through Title V]
21. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)], [Federally Enforceable Through Title V]
22. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
23. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)], [Federally Enforceable Through Title V]
24. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
25. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
26. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
28. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
29. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)], [Federally Enforceable Through Title V]

## Initial TV Permit

30. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
31. The operator shall ensure that the granular activated carbon vapor control system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
32. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
33. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
34. This unit does not store organic materials which are liquid at standard conditions and which are used as solvers, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-96-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

420,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #10004 VENTING TO 2000 LB CARBON CANNISTER SHARED WITH S-37-95

## PERMIT UNIT REQUIREMENTS

1. Tank liquid throughput shall not exceed 2,454 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
2. True vapor pressure (TVP) of liquids stored shall not exceed 2.96 psi at storage temperature. [District NSR Rule], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623], [Federally Enforceable Through Title V]
4. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
5. Permittee shall use District approved VOC detection device, calibrated with methane in accordance with EPA Method 21, to monitor VOC emission concentration. [District Rule 4623], [Federally Enforceable Through Title V]
6. Carbon canister shall be replaced when vapor concentration exceeds 150% of the initial vapor concentration. If the initial vapor concentration is less than 7 ppmv the canister shall be replaced when the concentration is greater than 10 ppmv. [District NSR Rule], [Federally Enforceable Through Title V]
7. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, VOC emission concentration, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 1070 & 2520, 9.4.2], [Federally Enforceable Through Title V]
8. The permittee shall comply with all applicable notification, recordkeeping and monitoring requirements of Rule 4001. [District Rule 4001], [Federally Enforceable Through Title V]
9. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)], [Federally Enforceable Through Title V]
10. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
12. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)], [Federally Enforceable Through Title V]



## Initial TV Permit

14. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
15. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
16. Any component leak shall be repaired to a leak-free condition or vented to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
17. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
20. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)], [Federally Enforceable Through Title V]
21. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)], [Federally Enforceable Through Title V]
22. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
23. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)], [Federally Enforceable Through Title V]
24. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
25. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
26. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
28. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
29. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)], [Federally Enforceable Through Title V]

## Initial TV Permit

30. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
31. The operator shall ensure that the granular activated carbon vapor control system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
32. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
33. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
34. This unit does not store organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, the requirements of District Rules 4661 (as amended December 17, 1992) and 4801 (as amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-97-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

3,000 BBL (126,000 GALLON) FIXED ROOF ORGANIC LIQUID STORAGE TANK #3012 SERVED BY VAPOR CONTROL SYSTEM S-37-8

## **PERMIT UNIT REQUIREMENTS**

1. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623], [Federally Enforceable Through Title V]
2. Average daily tank liquid throughput (on annual basis) shall not exceed 1,273 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
3. Reid Vapor Pressure (RVP) of liquids stored shall not exceed 8.0 psi. [District NSR Rule], [Federally Enforceable Through Title V]
4. Tank shall be equipped with operational liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
5. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
6. Permittee shall use District approved VOC detection device, calibrated with methane in accordance with EPA Method 21, to monitor VOC emission concentration. [District Rule 4623], [Federally Enforceable Through Title V]
7. Permittee shall keep accurate records of Reid vapor pressure, storage temperature, types of liquids stored, and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District Rule 1070 and Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
8. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)], [Federally Enforceable Through Title V]
9. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) or 40 CFR 60.112b(b)(1) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f). [40 CFR 60.112b(a)(3)(ii), 40 CFR 60.113b(d)], [Federally Enforceable Through Title V]
11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
12. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)], [Federally Enforceable Through Title V]

## Initial TV Permit

14. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
15. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
16. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
17. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
19. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
20. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)], [Federally Enforceable Through Title V]
21. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)], [Federally Enforceable Through Title V]
22. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
23. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)], [Federally Enforceable Through Title V]
24. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
25. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
26. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
28. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
29. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)], [Federally Enforceable Through Title V]

## Initial TV Permit

30. If the control device used for this tank is a flare, operator shall record all periods of operation during which the flare pilot flame is absent. [40 CFR 60.115b(d)(2)], [Federally Enforceable Through Title V]
31. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
32. If the control device used for this tank is a flare, operator shall submit semiannual reports to the APCO of all periods recorded in which the pilot flame was absent. [40 CFR 60.115b(d)(3)], [Federally Enforceable Through Title V]
33. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-99-1

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

1100 BBL FIXED ROOF RECOVERED ORGANIC LIQUID STORAGE TANK WITH PV VENT. (TANK #1008)

## PERMIT UNIT REQUIREMENTS

---

1. The true vapor pressure (TVP) of any liquid introduced or stored in the tank shall not exceed 0.06 psia at storage temperature. [District NSR Rule], [Federally Enforceable Through Title V]
2. Liquid throughput shall not exceed 1800 barrels per month. [District NSR Rule], [Federally Enforceable Through Title V]
3. The permittee shall record the type of liquid and true vapor pressure of any liquid introduced or stored in the tank. [District NSR Rule], [Federally Enforceable Through Title V]
4. The permittee shall keep records of monthly throughput. [District NSR Rule], [Federally Enforceable Through Title V]
5. All records shall be maintained for a period of at least five years and shall be made available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
6. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity range of greater than 20 deg up to 30 deg, as determined by ASTM Method D 287, may be determined by using other equivalent test methods approved by APCO, ARB, and EPA. TVP of crude oil with API gravity of 20 deg or less may be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for the Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph". [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623. [District Rule 2520, 9.1], [Federally Enforceable Through Title V]
10. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-100-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

180 BHP INGERSOLL-RAND, MODEL JVG-6, GAS-FIRED IC ENGINE (SERIAL # 6BJ537) WITH NSCR DRIVING MAKEUP COMPRESSOR UNIT SERVING THE DIESEL HYDROTREATER (S-37-77)

**PERMIT UNIT REQUIREMENTS**

1. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule], [Federally Enforceable Through Title V]
2. Total volume of fuel gas combusted by the IC engine compressor shall not exceed 1,620 scf/hr. [District NSR Rule], [Federally Enforceable Through Title V]
3. Fuel gas sulfur content shall not exceed 0.75 grains of sulfur per 100 dry standard cubic feet of fuel gas. [District NSR Rule], [Federally Enforceable Through Title V]
4. PM10 emissions shall not exceed 0.017 lb/Mscf of fuel burned. [District NSR Rule], [Federally Enforceable Through Title V]
5. NOx emission concentrations shall not exceed 50 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 90%. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
6. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
7. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
8. Permittee shall comply with all inspection, maintenance and recordkeeping requirements of Rules 4451 and 4452. [District Rule 4451 and 4452], [Federally Enforceable Through Title V]
9. Leaks from valves and connectors subject to a BACT requirement and subject to the provisions of Rule 4451 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured one (1) cm from potential source. [District NSR Rule & District Rule 4451], [Federally Enforceable Through Title V]
10. Leaks from pump and compressor seals subject to a BACT requirement and subject to the provisions of Rule 4452 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured one (1) cm from potential source. [District NSR Rule & District Rule 4452], [Federally Enforceable Through Title V]
11. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 1081 & District Rule 4701], [Federally Enforceable Through Title V]
12. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 1081, District Rule 2520, 9.3.2, and District Rule 4701], [Federally Enforceable Through Title V]
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
15. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701], [Federally Enforceable Through Title V]
16. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for twelve months if two consecutive deviations are observed during quarterly monitoring. [District Rule 2520, 9.3.2, 9.4.2, & District Rule 4701], [Federally Enforceable Through Title V]

## Initial TV Permit

17. If the NOX or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall immediately notify the District, and conduct a certified source test within 60 days of the first exceedance. [District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
18. Permittee shall maintain accurate records of fuel gas BTU content, and daily records of volume and sulfur content of gas burned. [District Rule 1070], [Federally Enforceable Through Title V]
19. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NOX and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4701], [Federally Enforceable Through Title V]
20. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4701], [Federally Enforceable Through Title V]
21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407], [Federally Enforceable Through Title V]
22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 & Kern County Rule 404], [Federally Enforceable Through Title V]
23. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801], [Federally Enforceable Through Title V]
24. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
25. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
27. All units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
28. An engine operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
29. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
30. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
31. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]



## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-101-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

180 BHP INGERSOLL-RAND, MODEL JVG-6, GAS-FIRED IC ENGINE (SERIAL # 6BJ518) WITH NSCR DRIVING RECYCLE COMPRESSOR UNIT SERVING THE DIESEL HYDROTREATER (#S 37-77)

## PERMIT UNIT REQUIREMENTS

1. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule], [Federally Enforceable Through Title V]
2. Total volume of fuel gas combusted by the IC engine compressor shall not exceed 1,620 scf/hr. [District NSR Rule], [Federally Enforceable Through Title V]
3. Fuel gas sulfur content shall not exceed 0.75 grains of sulfur per 100 dry standard cubic feet of fuel gas. [District NSR Rule], [Federally Enforceable Through Title V]
4. PM10 emissions shall not exceed 0.017 lb/Mscf of fuel burned. [District NSR Rule], [Federally Enforceable Through Title V]
5. NOx emission concentrations shall not exceed 50 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 90%. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
6. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
7. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule & District Rule 4701], [Federally Enforceable Through Title V]
8. Permittee shall comply with all inspection, maintenance and recordkeeping requirements of Rules 4451 and 4452. [District Rule 4451 and 4452], [Federally Enforceable Through Title V]
9. Leaks from valves and connectors subject to a BACT requirement and subject to the provisions of Rule 4451 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured one (1) cm from potential source. [District NSR Rule & District Rule 4451], [Federally Enforceable Through Title V]
10. Leaks from pump and compressor seals subject to a BACT requirement and subject to the provisions of Rule 4452 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured one (1) cm from potential source. [District NSR Rule & District Rule 4452], [Federally Enforceable Through Title V]
11. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 1081 & District Rule 4701], [Federally Enforceable Through Title V]
12. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 1081, District Rule 2520, 9.3.2, and District Rule 4701], [Federally Enforceable Through Title V]
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
15. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701], [Federally Enforceable Through Title V]
16. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for twelve months if two consecutive deviations are observed during quarterly monitoring. [District Rule 2520, 9.3.2, 9.4.2, & District Rule 4701], [Federally Enforceable Through Title V]

## Initial TV Permit

17. If the NOX or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall immediately notify the District, and conduct a certified source test within 60 days of the first exceedance. [District Rule 2520, 9.3.2 & District Rule 4701], [Federally Enforceable Through Title V]
18. Permittee shall maintain accurate records of fuel gas BTU content, and daily records of volume and sulfur content of gas burned. [District Rule 1070], [Federally Enforceable Through Title V]
19. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NOX and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4701], [Federally Enforceable Through Title V]
20. Permittee shall maintain records of source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4701], [Federally Enforceable Through Title V]
21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407], [Federally Enforceable Through Title V]
22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 & Kern County Rule 404], [Federally Enforceable Through Title V]
23. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801], [Federally Enforceable Through Title V]
24. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
25. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
26. The following conditions must be met for representative units to be used to test for pollutant (NO<sub>x</sub>) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
27. All units in a group for which representative units are annually source tested for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
28. An engine operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
29. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
30. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
31. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-102-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

10,000 BBL (420,000 GALLON) FIXED ROOF ORGANIC LIQUID STORAGE TANK #10005 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PTO S-37-8.

**PERMIT UNIT REQUIREMENTS**

1. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rules 4001 Subpart Db and 4623], [Federally Enforceable Through Title V]
3. Vapors shall be collected as part of vapor recovery system listed on permit S-37-8. [District NSR Rule], [Federally Enforceable Through Title V]
4. Reid Vapor Pressure (RVP) of any liquid introduced, placed, or stored shall not exceed 15.0 psi. [District NSR Rule and Rule 4623], [Federally Enforceable Through Title V]
5. When RVP of liquid introduced, placed or stored in tank is less than or equal to 6.0 psi, tank liquid throughput shall not exceed 10,000 barrels per day (420,000 gallons per day). [District NSR Rule], [Federally Enforceable Through Title V]
6. When RVP of liquid introduced, placed or stored in tank is greater than 6.0 but less than or equal to 7.5 psi, tank liquid throughput shall not exceed 6,000 barrels per day (252,000 gallons per day). [District NSR Rule], [Federally Enforceable Through Title V]
7. When RVP of liquid introduced, placed or stored in tank is greater than 7.5 but less than or equal to 10.0 psi, tank liquid throughput shall not exceed 2,000 barrels per day (84,000 gallons per day). [District NSR Rule], [Federally Enforceable Through Title V]
8. When RVP of liquid introduced, placed or stored in tank is greater than 10.0 but less than or equal to 15.0 psi, tank liquid throughput shall not exceed 1,000 barrels per day (42,000 gallons per day). [District NSR Rule], [Federally Enforceable Through Title V]
9. Tank shall be equipped with operational stored liquid temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
10. Permittee shall maintain on site for a period of at least five years accurate records of storage temperature, Reid Vapor Pressure, and daily throughput of liquids introduced, placed or stored in the tank, and such records shall be made readily available for District inspection upon request. [District NSR Rule and Rules 2520, 9.4.2 and 4623], [Federally Enforceable Through Title V]
11. Permittee shall satisfy all applicable requirements of District Rule 4001 - New Source Performance Standards, Subpart Kb, including notification and reporting requirements. [District Rule 4001], [Federally Enforceable Through Title V]
12. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)], [Federally Enforceable Through Title V]
13. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
14. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) or 40 CFR 60.112b(b)(1) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f). [40 CFR 60.112b(a)(3)(ii), 40 CFR 60.113b(d)], [Federally Enforceable Through Title V]
15. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit

16. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
17. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)], [Federally Enforceable Through Title V]
18. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
20. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
21. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
23. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
24. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)], [Federally Enforceable Through Title V]
25. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)], [Federally Enforceable Through Title V]
26. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
27. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)], [Federally Enforceable Through Title V]
28. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
29. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]

## Initial TV Permit

30. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
31. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
32. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
33. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)], [Federally Enforceable Through Title V]
34. If the control device used for this tank is a flare, operator shall record all periods of operation during which the flare pilot flame is absent. [40 CFR 60.115b(d)(2)], [Federally Enforceable Through Title V]
35. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
36. If the control device used for this tank is a flare, operator shall submit semiannual reports to the APCO of all periods recorded in which the pilot flame was absent. [40 CFR 60.115b(d)(3)], [Federally Enforceable Through Title V]
37. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

**Initial TV Permit**

**San Joaquin Valley**  
**Air Pollution Control District**

**PERMIT UNIT:** S-37-105-3

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

SOIL AND GROUNDWATER REMEDIATION PROJECT SERVED BY A VACLEAN 1000-2 INTERNAL COMBUSTION ENGINE WITH A 3-WAY CATALYTIC CONVERTER

**PERMIT UNIT REQUIREMENTS**

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101], [Federally Enforceable Through Title V]
2. Only liquified petroleum gas or natural gas shall be used as auxiliary fuel for the combustion of VOCs. [District NSR Rule], [Federally Enforceable Through Title V]
3. The soil remediation system shall be maintained in proper operating condition at all times. [District NSR Rule], [Federally Enforceable Through Title V]
4. Sampling ports adequate for extraction of grab samples, measurement of gas flow rate, and use of an FID, PID or other District-approved VOC detection device shall be provided for both the influent and effluent gas streams. [District NSR Rule and Rule 1081], [Federally Enforceable Through Title V]
5. Laboratory samples shall be taken at the initial inspection, under the supervision of the APCD Inspector. Samples shall be taken from both the influent and the effluent gas stream sampling ports. [District NSR and Rule 1081], [Federally Enforceable Through Title V]
6. Laboratory samples shall be analyzed for TPH and BTEX. [District NSR Rule and Rule 1081], [Federally Enforceable Through Title V]
7. Measurements to determine the influent and the effluent gas flow rates shall be taken at the initial inspection. Flow rate calculations shall be submitted to the District with the laboratory sample analysis results. [District NSR Rule and Rule 1081], [Federally Enforceable Through Title V]
8. Ongoing compliance with VOC emission rate and control efficiency requirements shall be demonstrated by sampling both the influent and the effluent gas streams with an FID, PID, or other District-approved VOC detection device. [District NSR Rule and Rule 1081], [Federally Enforceable Through Title V]
9. Sampling to demonstrate ongoing compliance shall be performed at least once per week. [District NSR Rule and Rule 1081], [Federally Enforceable Through Title V]
10. Records of the cumulative running time and the measured influent and effluent VOC concentrations shall be maintained. [District Rule 1070], [Federally Enforceable Through Title V]
11. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2], [Federally Enforceable Through Title V]
12. The total NOx emission rate from the soil remediation system served by the internal combustion engine shall not exceed 0.5 lb/MMBtu. [District NSR Rule], [Federally Enforceable Through Title V]
13. The total CO emission rate from the soil remediation system served by the internal combustion engine shall not exceed 5.1 lb/MMBtu. [District NSR Rule], [Federally Enforceable Through Title V]
14. The total VOC emission rate from the soil remediation system served by the internal combustion engine shall not exceed 25.9 pounds in any one day. [District NSR Rule], [Federally Enforceable Through Title V]
15. Either the VOC control efficiency shall not be less than 95%, or the total VOC emissions rate shall not exceed 2 pounds in any one day. [District NSR Rule], [Federally Enforceable Through Title V]
16. Cumulative running time of the soil remediation system shall not exceed 139 days per year. [District NSR Rule], [Federally Enforceable Through Title V]
17. Operation of the soil remediation system shall not exceed 10 years without prior District approval. [District Rule 4102], [Federally Enforceable Through Title V]

## Initial TV Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-37-111-2

**EXPIRATION DATE:** 08/31/2007

**EQUIPMENT DESCRIPTION:**

55,000 BBL CRUDE OIL TANK VENTED TO GRANULAR ACTIVATED CARBON (GAC) VAPOR CONTROL SYSTEM

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule], [Federally Enforceable Through Title V]
2. Tank roof appurtenances shall be maintained leak free (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
3. Tank gauging, sampling devices, relief valves, manholes and etc. shall be equipped with gas-tight (as defined in Rule 4623) gaskets and shall remain closed at all times except during gauging or sampling. [District Rule 4623], [Federally Enforceable Through Title V]
4. Tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained gas-tight (as defined in Rule 4623). [District Rule 4623], [Federally Enforceable Through Title V]
5. Tank shall be equipped with an operational stored liquid temperature indicator. [District Rule 4623], [Federally Enforceable Through Title V]
6. Sampling ports adequate for extraction of grab samples, measurement of gas flow rate, and use of an FID, PID or other District-approved VOC detection device shall be provided for both the influent and effluent gas streams. [District Rule 1081 & Kern County Rule 108.1], [Federally Enforceable Through Title V]
7. Tank shall vent only to GAC control system and primary GAC vessel shall contain not less than 10,000 lbs of activated carbon. [District NSR Rule], [Federally Enforceable Through Title V]
8. When carbon in primary vessel is being replaced tank shall vent to temporary secondary GAC vessel. [District NSR Rule], [Federally Enforceable Through Title V]
9. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule], [Federally Enforceable Through Title V]
10. Only crude oil, no petroleum distillates or condensate, shall be introduced to tank. [District NSR Rule], [Federally Enforceable Through Title V]
11. True vapor pressure of liquids stored, introduced or held in this tank shall not exceed 5.0 psia. [District NSR Rule], [Federally Enforceable Through Title V]
12. Average daily tank throughput (on annual basis) shall not exceed 3700 bbl/day of fluid without prior District approval. [District NSR Rule], [Federally Enforceable Through Title V]
13. Laboratory samples shall be analyzed for TPH and BTEX. [District Rule 1081 & Kern County Rule 108.1], [Federally Enforceable Through Title V]
14. Initial compliance with VOC control efficiency shall be demonstrated by the results of the laboratory analysis. The results shall be submitted to the District within 60 days of the test. [District Rule 1081 & Kern County Rule 108.1], [Federally Enforceable Through Title V]
15. Sampling to demonstrate ongoing compliance shall be performed at least once per week except as provided below. Sampling shall be demonstrated using a District approved VOC detection device, calibrated with methane in accordance with EPA method 21, to monitor VOC emission concentration. [District Rule 1081 & Kern County Rule 108.1], [Federally Enforceable Through Title V]
16. If no liquids have been introduced to the tank for the preceding three weeks sampling to demonstrate ongoing compliance shall be performed once every three weeks. [District Rule 1081 & Kern County Rule 108.1], [Federally Enforceable Through Title V]
17. Carbon in primary vessel shall be replaced with fresh carbon when effluent VOC concentration from primary GAC vessel exceeds 150% of the initial concentration. If the initial effluent concentration is less than 5 ppmv carbon in primary vessel shall be replaced when effluent VOC concentration exceeds 10 ppm. [District NSR Rule], [Federally Enforceable Through Title V]
18. Carbon removed from primary vessel shall be sealed in vapor tight containers. [District NSR Rule], [Federally Enforceable Through Title V]
19. Permittee shall maintain accurate records of true vapor pressure, temperature and types of petroleum liquids in the tank, daily liquid throughput, and GAC influent and effluent VOC concentrations, such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule and Rule 4623], [Federally Enforceable Through Title V]

## Initial TV Permit

20. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)], [Federally Enforceable Through Title V]
21. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
22. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
23. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
24. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)], [Federally Enforceable Through Title V]
25. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of District Rule 4403. [District Rule 4403, 5.1.4], [Federally Enforceable Through Title V]
26. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
27. Any component leak shall be repaired to a leak-free condition or vented to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 4403, 5.3.1], [Federally Enforceable Through Title V]
28. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
29. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
30. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
31. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)], [Federally Enforceable Through Title V]
32. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)], [Federally Enforceable Through Title V]



## Initial TV Permit

33. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
34. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)], [Federally Enforceable Through Title V]
35. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
36. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
37. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
38. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
39. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
40. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)], [Federally Enforceable Through Title V]
41. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
42. The operator shall ensure that the granular activated carbon control system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

## Initial TV Permit